Disputations Against Divinatory Astrology

By Giovanni Pico della Mirandola

An English Translation

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Preface

Homer and Caecilius Statius, most ancient of poets, declare that the worst enemies are those that surround us under the guise of friendship. No truer judgement has been said, nor can any healthier medicine be prescribed. But why should we need the testimony of poets? Divine Truth, the teacher of life and morality, has warned us to avoid wolves beneath the sheep's fleece, and not to judge by appearances.

Indeed there is one type of enemy that can neither be turned aside nor overthrown, and we ourselves do not wish to conquer it. We meet it, embrace it on our own accord, and receive it. We stand with it against ourselves, rather than against it – as we should – though it is an illusion, and the cost is great. Therefore it must be studied more deeply, and for a longer time, and neither admitted rashly nor vanquished immediately.

Where truly a fallacy is detected, it must be expelled all the more sharply, for it leads covertly to destruction under the pretext of kindness. No less evil should those things be judged, which are not thought the worst because they are sometimes mixed with good. They are all the more destructive, because by their appearance, and mixture with good, they are more easily admitted. Once admitted, they take hold more firmly and retain their power more strongly. It is just as when poison is mixed with undiluted wine. Although the wine by its nature is most wholesome, its flavour nevertheless conceals the malice of the poison, and its strength drives it into the veins more deeply and quickly.

It must be observed that in the entirety of life, and especially in the arts and disciplines, those things that are most pernicious – those that are deceptions or other types of

vanity – pretend some flattery by means of deceit. And thus they might claim for themselves the name of science or art.

These deceptions might be rooted in fictitious authors from antiquity. Or in the allure of great promises and human curiosity. Or in some trick and appearance of probability, for falsehoods are sometimes more probable than truths, as Aristotle testifies. This is especially true when they are not examined or investigated, especially among the people and the multitude. It is characteristic of such individuals to err and to always be deceived, and to know nothing.

However, what is more fatal, what is harder to overcome, than error itself worming in under the title of wisdom? We pay attention to what it says, and we go mad with reason.

This is naught else than disregarding the mind, whose sole power – naturally given to us – is to drive away falsehoods. The lie itself may become more credible through testimony, stronger through power, and more fortified through protection. There is no further hope of recovery, when nature itself aids the illness.

As I have said, this happens through madness. The deception circulates among the people under the guise of art or science, and sells itself by falsely claiming to be wisdom of the highest order. It is no less insane for that reason. The more deceptive it is, the more ruinous it becomes. Just as among doctors, so I say, none are more delirious than those who prefer a sober countenance to delirium.

Moreover, this is an inherent flaw in all superstitions, none of which have any purpose other than imparting the precepts of madness. Foremost among these insanities is astrology, which has claimed the title for itself. For it enjoys primacy among superstitions generally, of which it is justly considered both mother and offspring.

When I speak of astrology, I do not mean that which measures the masses and the motions of the stars by mathematical reasoning. A certain and noble art, one most honourable and meritorious, and highly approved of by the authority of the most learned men.

Rather, I mean that which predicts future events from the stars. That which is a fraud of mercenary falsehood, is prohibited by laws both civil and pontifical, is kept alive by human curiosity, is mocked by philosophers, is practiced by charlatans, and which is regarded as suspect by all the best and wisest. Whose practitioners were formerly called Chaldeans from their national name, or from their profession, *genethliaci* [natal astrologers].

Subsequently, in order to render themselves respectable by means of association with the name, they called themselves mathematicians or astrologers, as if this were also one of the liberal arts disciplines, which might speak with reason about the stars. Separating itself by this distinction from true mathematics: the name astronomy was given to that and the name astrology given to this, with excessive and shameless zeal in stealing another's title. For indeed, as we shall explain, astrology has taken the name of another art.

Divinatory astrology, always striving with the ambition to be named after the stars, we shall dignify not with one name, but with both titles. And with regards to its rival – the one that discusses the motion of the stars – we shall call astrology *astrology* and astronomy *astronomy*, fittingly and deservedly.

Whatever may be decided about the name, having relied upon reason and the prejudices of the wisest men, I do indeed have no doubt in affirming that there is no trickery among the fraudulent arts that more deceives the gullible or which causes more harm to those persuaded by it.

It is so much more ruinous than the remaining superstitions, because it appears to more nearly approach the truth. Those others display the marks of their madness and unseriousness at first glance, and scarcely deceive anyone, save the utterly blind. Astrology

nourishes madness in its heart, and yet presents the form and semblance of wisdom, so that if you look from a distance or through a veil, its guise might ensnare you. If you bring your careful eye closer, you see it as a mere shadow or phantom, and in the clear light of day you shall abhor the deception of darkness.

Certainly, through rationale most manifest, it will become clearer than light that there is no greater fallacy and none more pernicious. Astrology displays the sky and planets from far-off, and from such a sublime and clear spectacle, you might easily believe that nothing fails to be truly foreseen. Soon, when you consider more attentively, you will see it to be such a sublime mirror that the images of earthly things do not ascend there, and so brilliant that our weakness grows dim beside its radiance. Then, when you come closer, you shall see, woven into its very fabric, portentous figures instead of celestial bodies. Stars transformed into animals. A sky full of fables. Indeed, a fictitious sky, one not made by God, but fabricated by astrology.

Astrology appears constructed with the support of proven dogma. It circulates books with mighty titles, and offers many rationales for its doctrines. Beyond mere reason, it is supported by experiments of prolonged observation, strengthened by means of diligent annotation. It is supported by the usage of many centuries, and has received approval in many ages.

How astonishing it is, to gaze through these mists and clouds with ignorant eyes. Astrology presents a beautiful and venerable image of itself, full of serious authority. When you have dispelled the shadows and illusions with the bright light of reason and diligent investigation, you will see that nothing in those books has value, and there is no authority in the authors. In the rationale there is no reason, in the observations there is no agreement, nothing reliable, nothing true, nothing credible, nothing of substance. Rather, it contradicts itself, and is false, empty, and ridiculous.

You can scarcely believe those who wrote these books had any faith in the things they were writing. Indeed, regarding vanity, you will not easily find something that offers more hope to seekers after gold, nor which promises greater or more desirable things.

Astrology makes itself the protector of prudence, setting forth conjectures about the future by means of certain precognition. But it also presents itself as the guardian of philosophy, whose greatest part is about the heavens. The astrologers wish to resolve philosophy to clarity through the influence of the skies. About medicine, it is not pertinent to speak. Nor about navigation, nor about agriculture, since astrology not only foretells the future for them, but also brings the powers of heaven down to earth. The arts operate most efficiently, and so the masters of all the arts may easily attain what they desire.

And this indeed has persuaded both the ancients and moderns towards religion. If it pleases the gods, it confers much authority and benefit to the universal and to Christianity. And as may be said, having imitated its master, astrology promises itself to those who worship the kingdoms of the world. It offers an emulation of the divine to those who taste from its tree, and the knowledge of good and evil.

Not only does astrology promise any useful thing in life, it is the most pestilent fraud of all. It is that very thing, as we will demonstrate, which corrupts all philosophy, adulterates medicine, weakens religion, produces or strengthens superstitions, fosters idolatry, takes away wisdom, pollutes morals, defames heaven, and makes men miserable, anxious, and restless. It makes slaves of the free, and in nearly all matters plainly makes them unfortunate.

When I investigated this myself, I thought I would be committing a sin no sacrifice could expiate if I were silent or concealed it, and if I did not at least attempt to wrest this poison from the hands of the credulous, to the best of my manly strength. Especially in this time, when more than ever, every age, rank, and sex is blind to this fraud.

Moreover, the more opponents truth is known to have, the more it is necessary to fight for it. Just as we desire to benefit all, so we desire to please only the good. Nor does the judgement of the multitude have credibility where reason and the agreement of the learned stand against it. Nor do we seek popular favour, but only the light of truth and the public benefit.

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Book One

First of all, I want the reader to know it has not been our invention or audacity to reject and refute astrology. Rather, from earliest antiquity, good judgement has always opined that this is not a true profession, as it brings forth so many troubles, so many insanities, everywhere under the guise of science and utility. Hence, by the laws of the Caesars and the prudence of the wise, astrology was eliminated as noxious to the life of cities. Hence by the oracles of prophets, by the decrees of pontiffs, by the voices and doctrines of the most holy men, it was condemned as a disease and destructive to piety. Hence by philosophers and mathematicians, and whomever may have learned wisdom from books – and not merely to speak – it is held in contempt, as being false, of no use, impossible, no friend to philosophy, or refuted.

To others, wallowing in ignorance or denial, we shall render explanations in this first book, before the matter is dealt with by reason. Given the authority of the accusations against astrology, our own accusations clearly do not spring from envy or ill will. Rather, for men of good conscience, a defence of astrology – if any make it – will bring only shame.

Indeed, we shall begin with the philosophers, whose authority is greater than that of the wise men, and who are sometimes more commonly accepted than the prophets.

That Pythagoras gave no credence to astrology is affirmed by Theodoret. Both Diogenes Laertius and Plutarch also indicate this. This quote is attributed to Democritus: “no-one looks at what is before their feet, but they scrutinise the regions of the sky.”

Academicus Favorinus and Panaetius the Stoic criticised astrology. By Seneca it was mocked; by Cicero refuted. Who is unaware that Carneades argued against it, or that Bion the Philosopher opposed it harshly? If it surpasses all madness, to a level even Orestes the Mad could not approach, how much madness does astrology contain, that even raving Epicurus could not agree with it!

Plato and Aristotle, the Princes of Philosophy, deemed astrology unworthy of discussion, and condemned it more by their silence than anyone could with words or writings. For those who think otherwise, I ask them to respond: why, throughout the course of their writings, when the properties of the heavens are to be explained or when the causes of the lower realms need to be sought, do Plato and Aristotle never reference astrology?

Did they perhaps not consider the first and most noble part of the universe – the bodies that move and cause movement, the efficient cause, without which nothing in nature can be done or known, if one believes the astrologers – to be within the philosopher's domain? To know the universal principles, as the greatest thinkers set them out, and to understand some particular principle, would not be the task of an eminent philosopher, but of an imperfect seeker.

Why did Aristotle leave his book *On the Heavens* so barren, when he could have said so much, so splendidly? If he could, he ought to have indicated to us the specific stars and planets, with their efficiency, properties, and conditions. Why, in his *Meteorology*, having thoroughly investigated the causes of rain, of comets, and of winds, does he always forget astrological matters? Why, in *On the Generation of Animals*, does he never refer to twins, nor monstrous or prodigious births, nor the sex or number of offspring, nor their form or qualities, as being related to the stars, nor even mention in passing that they could be?

Why does Plato do the same thing in the *Timaeus*? Why, before Plato, does Timaeus himself, the greatest of philosophers according to Plato, a Pythagorean and an astronomer, do

likewise in his book *On Nature*? And why does Ocellus Lucanus, in his book *On the World*, also do this, he being most eminent in philosophy according to the testimony of Plato?

Did they scorn astrology as though it were insignificant – when if it were true, it could be considered of great importance? Or did these philosophers, perhaps, not scorn astrology but simply fail to understand it? Perhaps when they spent time in Egypt and Babylon, they were unable to comprehend matters well-known and widely discussed among those peoples.

Certainly, they did not consider astrology to fall within their own role as philosophers. Unless they were so ignorant of their own profession, that they simply believed they had no duty to address the matter. And yet the supposed truths of astrology – as astrologers strongly contend – are demonstrated not by observation alone, but also by reason.

What else can be said, then, but that Plato and Aristotle were of the opinion that the 'causes' of which astrologers speak are not celestial. And that astrology is neither art nor science, else these thinkers would have made mention of it alongside other matters. Astrology is but a trifle, or a fraud of charlatans, like the tricks of geomancy, hydromancy, and incantation, which no ancient philosopher ever considered among the arts and sciences.

Indeed, if astrology were an art, it would depend upon natural science, just as medicine does. Just as the doctor learns from the philosopher the nature of shrubs, herbs, and animals, in restoring health to bodies, so too the astrologer would learn from the philosopher the powers and properties of the stars. He might then use this for prediction, and might teach others how to do so too.

But whoever considers divinatory astrology a part or end of mathematical astronomy, and thinks it has more connection with that discipline, if astrology were thought to exist as a field of knowledge at all, than to natural philosophy… we shall make clear how far he is mistaken. We now only caution that, though the matter has been placed beyond dispute among the learned, it pertains to the philosopher to know whatever can be known about the

stars. The task of measuring them is assigned to the astronomer. Predicting the future based on their positions and configurations is for the astrologer. If, of course, an astrologer can even be granted the status of artisan.

The silence of Plato and Aristotle on this matter would be entirely lazy and inexcusable, if they failed point out things they should have thoroughly addressed. Throughout Plato's works, we see him consider a vast array of teachings and doctrines. Aristotle's *Problems* poses questions on mathematics and all kinds of arts and disciplines. It offers solutions drawn from every school of thought, even the most ancient, but nowhere utters a word about astrology. Likewise, the *Eudemian Ethics*, where Aristotle discusses good fortune.

If we are not sufficiently moved by this evidence, let us listen to the disciples of each philosopher. They bear witness to the view their masters express through silence.

Plotinus is held as nearly the foremost authority in the Platonic school. Porphyry writes that, after diligently applying himself to astrology and ultimately uncovering the vanity and falseness of the art, Plotinus denied all faith in astrologers' predictions. Therefore, in a book dedicated to this subject, titled *On the Influence of the Stars*, he vigorously ridiculed and refuted the doctrines of astrologers.

Offended by this, Maternus fabricates many things about Plotinus' death, as though fate had exacted punishment against him. It is easy to understand from Porphyry himself, Plotinus' disciple, that these claims are utterly false. Porphyry describes plainly and faithfully the type of illness by which Plotinus died, the cause of it, and why he left Rome.

Origen Adamantius, preeminent in the philosophical sect and in all disciplines, frequently, and with many arguments, mocks the vanity of astrology. Perhaps superstitious people deem his testimony of lesser value because he was a Christian. But Eudoxus was not a Christian and even listened to Plato. He lived in Egypt, and was regarded as the foremost

astronomer of his time. Eudoxus wrote that astrologers, who predict people's fates based on birth charts, are not to be believed in any respect.

Alexander of Aphrodisias, the greatest authority on Aristotelian philosophy, wrote a book *On Fate* for the Caesars, Septimius Severus and his son Antoninus [Caracalla]. In the book, he rejects the necessity of fate and remains silent on astrological matters. A mere mention of fate can lead men astray. Perhaps Alexander's only reason for writing this commentary was to correct Septimius Severus' inclination towards superstition with philosophical reasoning.

Averroes, a renowned philosopher in the same school and a serious judge of natural things, everywhere tears apart, condemns, and assails astrology. In his *Metaphysics*, he labels as a fable the notion that earthly creatures are subject to the celestial images they resemble. Without this idea, a large part of astrological superstition collapses.

Commenting on Avicenna's *Cantica*, Averroes says astrology is contrary to philosophy, and elsewhere that nearly all astrologers' doctrines are false. The entire 'art' itself is deemed vain and weak. Also, in his books against Al-Ghazali, he asserts that artificial images, into which astrologers think they can channel the powers of the heavens, are entirely ineffective.

Avicenna, a man great in all disciplines, demonstrates in the final book of his *Metaphysics*, by means of many arguments, that future events cannot be foreseen by astrologers, and therefore no faith should be applied to their predictions.

I omit Henry of Hesse [Henry of Langenstein] and several illustrious modern thinkers at the University of Paris, who have attacked this vanity in their written works. The majority of philosophers despise astrology rather than refute it, the subject being akin other trickster arts, old wives' tales, and the delusions of conjurers.

But this is worthy of notice: even astronomers reject astrology, which could not happen except through their awareness of its falsehood. Otherwise, those learned in the movements of the heavens would accrue much knowledge, glory, and profit from astrology's credibility and authority.

That man whom we recently mentioned, Eudoxus of Cnidus, was foremost in mathematics, and it is on his judgement in astronomical matters that Aristotle relies. He was also a most prudent lawgiver – having written laws for his fellow citizens – as well as a distinguished physician under Philistius, and a philosopher under Plato. He cautions us against believing astrologers, and records this in writing. Mathematical reasoning had demonstrated this to him, and his teacher Plato had persuaded him of it.

Cassandrus and Anchialus excelled in astronomy, but never employed astrological prediction. Panaetius is our authority for this. Scylax of Halicarnassus, although exceedingly learned in all mathematics, nevertheless rejected the entire field of divination by the stars.

Let us move on to the more recent thinkers.

Nicholas Oresme, an exceptionally sharp philosopher and a highly skilled mathematician, indignantly attacked astrological superstition in a special commentary. He believed nothing to be more deceptive, nothing more detestable, and nothing more harmful to all classes, especially to people of high status. Giovanni Marliani, in our own time, was considered a foremost mathematician. He always refrained from astrological predictions, and even began writing about their falsity in his final years. However, being advanced in age, he was unable to complete this work, as he was taken by death.

A man of the utmost humility claimed to have the most certain proofs against the astrologers. This, together with others, has been reported to me more than once by our Luchino, who was his friend and is himself also a first-rate astronomer.

Paolo Toscanelli was a Florentine, very learned in medicine, but also especially in astronomy and in Greek and Latin letters. When asked for his opinion on astrology, he declared it to be uncertain and deceptive. He brought forward, among other things, the example of himself as proof. When he had completed eighty-five years, he studied his own birth chart with greatest care, but found no vital constellation.

I would mention cases among those who still live, of philosophers and astronomers who take the same view. But I do not know whether they wish to raise envy against themselves from the men of the skies and the masters of fate. Furthermore, our Marsilio [Ficino] wrote openly against the astrologers, following the footsteps of Plotinus, where through interpretation and explanation, he greatly illuminated the Platonic matter. When attending to the health of men, if Marsilio sometimes seeks help from the heavens, he wishes for such aid more than he actually believes in it.

I can most faithfully testify to the mind of this man, Ficino, with whom I am intimately acquainted, and who more than anyone has frequently and effectively urged me to expose this deception. Whenever we joke together, nothing yields a greater harvest of laughter than the vanity of astrologers, especially if [Angelo] Poliziano joins us as a third party. Indeed, he always joins in, a remarkable mocker of all superstitions.

Nor should we ignore the judgement of our Niccolò Leoniceno. While he treats mathematics, like all the liberal sciences, with true fidelity, he considers divinatory astrology vain. He does not believe those who wrote on the subject, especially the more learned, had faith in what they were writing. If you ask him why they wrote their works, Leoniceno answers it was part avarice, part the ignorance of rulers.

For, he says, while eminent men laboured day and night in measuring the motions and bodies of the stars through mathematical astronomy, they obtained no reward from their

rulers. Such rulers, of course, cared nothing for how large the stars are, nor how swiftly they revolve through the heavens.

When the learned men realised that investigating the heavens meant deprivation of earthly goods, they devised a charming ruse to bind the hearts of princes and make them admirers of their profession. Thus, they invented the idea that the fortunes of all, but especially those of princes – their children, life, realms, victories, and health – depend upon these stars. They claimed that since they had long observed the stars' movements and nature, they deeply understood what each foretold, for good or ill.

Moreover, they claimed to have remedies at hand to repel foreseen evils and confirm blessings. If a fortunate hour were noted, images could be fashioned from certain materials akin to those celestial natures. Into these, by wondrous contrivances, a virtue drawn from the stars could be implanted. This virtue would make people exceedingly fortunate and powerful, enabling one to obtain easily whatever was desired through the mere touch or carrying of images. To make these claims more credible, the astrologers added that the deeper mysteries of this art were divinely revealed to them – just as Petosiris and Aesculapius received many teachings from the mighty spirit of Mercury.

We read in Maternus that ignorant yet inquisitive princes, eager for the things these astrologers promised, were easily led to believe them, so much so that they favoured the practitioners with rewards. Thus they spurred on these studies more and more each day.

Our Leoniceno, speaking seriously and not far from the truth, expresses these views about astrologers.

Above all, we must guard against astrologers slipping into our trust. They write volumes falsely attributed to great authorities – a trait they share with all superstitions. Since the claims they propagate cannot be confirmed by reason, whether they believe them to be true themselves or merely wish others to believe them, they attribute such books of fables to

illustrious and ancient men. Thus they seek to lend credibility to their error by means of fictitious authors.

Works of this type include *On the Properties of the Elements*, which speaks of great conjunctions, and *On the Secrets*, dedicated to Alexander. The astrologers attribute these texts to Aristotle without any fault or demerit on the part of that good philosopher. The magi similarly circulate *On the Cow* and that which they call *Of the Institutions* under Plato's authorship. These trivial works refer to execrable dreams and figments, no less alien to Plato's pen than they are to his goodness and wisdom.

Once, the Gnostic heretics, called Zoroastrians, displayed the books of Zoroaster, by which they made their heresy seem of venerable antiquity. As Porphyry demonstrated with many arguments, these books were new and apocryphal, and not of Zoroaster.

Those less experienced in the humanities can easily be deceived and ensnared by such lies, though the learned can recognise the style and character of the authors and discern the counterfeit from the authentic. However, the writings of our astrologers, and those texts now in the hands of superstitious practitioners, are so far removed from any resemblance of truth that their deceptions are evident to anyone.

Who would believe Ovid in *On the Old Woman*, where marvellous things are proclaimed concerning great conjunctions and the Christian law? Roger Bacon, a great patron of astrology, uses the testimonies of no writer more willingly, unless perhaps he prefers Artephius. Artephius reveals countless secrets, such as inspecting not the stars but the wash, to foreknow a man's life, character, and all his conditions. He is also held in great regard by the philosopher whose book *On Cosmology* is said to have been translated by St Jerome.

Such reading, however, is ridiculous. None could be more so, yet it is frequently cited by our Roger [Bacon] in his letter to Clement. I am almost led to believe he composed a certain little book himself, titled *On the Errors of Theology Students*. The first volume

condemns theologians for basing their discussions more on Aristotle and others than on the likes of *On Cosmology*'s author, Artephius, *On the Old Woman*, and similar poets.

The book is falsely attributed to Albertus Magnus. Albertus never mentioned these fantasies in his theological writings; rather, *On the Errors of Theology Students* should rightfully be attributed to Bacon, whose other works clearly show him to have held such views, always replete with the testimonies and oracles of disreputable authors. If he were able to trust the likes of them, no wonder he could also believe in astrology.

The superstitious class have become so brazen they even circulate a book under the title *On Necromantic Images*, and attribute it to Thomas Aquinas. Thus, it is less surprising they fabricate certain astrological books like *On Rings*, supposedly by Ptolemy. Also, books addressed to Ariston, which Ptolemy never wrote. Replete with recklessness or ignorance, many attribute a certain work by Someone from York to Albertus Magnus. They even cite books by Hippocrates, where the prognosis of diseases is based on the course of the stars. I believe Hippocrates was ignorant of this when he wrote his books on prognostics, which were expounded by Galen and widely celebrated throughout Greece. Or, if he did know, he kept such matters more secret, and reserved them for those duly initiated.

I pass over what Al-Kindi and others, followers of Pythagoras and Aristotle, say regarding rains and various questions, as well as that book titled *On Rulership*, supposedly by Aristotle, which speaks of celestial matters in such terms. I only wish they had not attributed profane ideas to holy men as well, and had not attributed the translation of a certain book on enchantments to the divine Jerome.

Although, since they have slandered angels, they can easily slander men. They claim these delusions were passed down by Adam's angel, others by Solomon's, and still others by the guardian of Tobias.

Now let us leave the magicians, to whom we have been led, and return to their neighbours in error, supposedly serious astrologers. Aristotle showed – in a single word – what he thought of this type of person, when in the *Problems* he ranked the astrologer alongside the mime and the conjurer.

But, you might say, if our cited authorities did not write astrological material, those who did were still philosophers: men like Albumasar, Ptolemy, Haly Abenragel, Julius Firmicus Maternus, and countless others. Both Latin and Greek, and barbarian authors, men of the highest learning and intellect.

You, sir, have aptly reminded me. Astrology has not only been largely dismissed by philosophers, but those writing in support of it either have not philosophised at all, or have philosophised poorly.

Therefore, if it pleases the gods, leave us Pythagoras, Plato, and Aristotle. Keep for yourselves your Albumasars, Alchabitiuses, Avenazras [Ibn Ezras], and Abenragels. It will be shown how such thinkers deviate from the true philosophical mind. They engage with the most fabulous matters, make assertions that lack all reason, speak in contradictions, and even rebut themselves. All this, we shall plainly demonstrate.

These traits are utterly alien to the philosopher, whose primary characteristic is to believe and affirm nothing that cannot be demonstrated either by evidence or by reason.

But let us examine the claim that the authors of astrology have philosophised little, or else have philosophised poorly.

The others will easily crown Ptolemy as their prince; for he is indeed the most learned of astrologers and, so far as mathematics is concerned, a man most ingenious. But with regard to horoscopes and natal astrology, one is accustomed to say he is *optimus malorum.* The best of the bad.

Ptolemy indicates his handling of philosophical matters in the prologue of the *Great Composition*, which they call the *Almagest*, and in the books of the *Apotelesmata* – that is *On the Effects*. In beginning his mathematical books, he divides contemplative philosophy, in accordance with Aristotle's categories, into three types: theological, natural, and mathematical.

Explaining the reason for this division, he says all existing things consist of three components: matter, form, and motion, which can be separated in thought but not in reality. From these three components, therefore, three types of philosophy can be derived. Theological philosophy from motion, since the cause of the first motion is none other than God. Natural philosophy from matter. Mathematical philosophy from form.

This is Ptolemy's opinion, in which there are as many errors, according to good philosophers, as there are words. No one even slightly learned would doubt this.

For not all things come from those three. If, when he says 'everything,' he means natural things, how does philosophy revolve around a threefold division into the physical, divine, and mathematical?

Nor does anything among the natural consist of motion, although nothing comes to be or endures without it. But let us allow Ptolemy this licence. How would Aristotle himself, whom Ptolemy approves of, grant that things in motion are the object of theology, when God Himself, as the author and cause of the first motion, is studied not by the theologian, but by the philosopher?

The remaining points are either false or easily seen to have been made by a man unskilled or unacquainted with philosophy. Indeed, from the books of *Apotelesmata*, which they call the *Tetrabiblos*, the Four Books, come more notable and evident errors. Ptolemy believes the Moon to be humid, since moist vapour from the Earth rises towards it, for it is nearer to the Earth than the other stars. By the same reasoning, he believes Saturn dry,

because it is farther from these vapours; he also believes it cold, because it is far from the heat of the Sun.

Ptolemy holds Jupiter to be temperate, because it is positioned between cold Saturn and hot Mars; and he believes many other things of this kind about the properties of the stars, which philosophers will laugh at rather than refute.

Although the Arab commentator, blushing at the error of the master, attempts to translate Ptolemy's words into another meaning, Ptolemy does not allow himself to be defended or excused. He so strongly asserts, affirms, and emphasises these things that no doubt about his meaning remains.

And from one such example, you can learn to know them all, just as from the best, one can infer the nature of the worst.

After Ptolemy comes Albumasar. He was neither philosopher nor dialectician, and possessed little learning in mathematics, being instead a professor of grammar. Avenrodan narrates that he turned to astrology after writing histories, and how truthful Albumasar was to this profession can be easily understood. He thinks Ptolemy the astrologer was one of the kings of Egypt after Alexander – as if there were not five hundred years between them, when the Ptolemaic dynasty flourished four hundred years before Christ, and Ptolemy the astrologer wrote under the Emperors Hadrian and Antoninus Pius.

See this remarkable researcher, this faithful observer of the highest matters, who with regard to obvious facts shows such sloth or slowness of intellect! We shall later demonstrate his errors in astrological matters, and how he has insisted on such clear and acknowledged falsehoods as if they were true.

What should I say of Maternus? He hallucinates over the rudiments of arithmetic, writing about the meanings of Mercury when Mercury occupies the middle of the sky in the nocturnal geniture. As if Mercury could ever be more than forty (or thereabouts) parts away

from the Sun, and as if the Sun, during the night, were not more than seventy away from the middle of the sky! I shall pass over many other things. Although there is always much eloquence in him, you find precious little wisdom in the man.

Now, Manilius, unless he wields a poet's pen… Good God, with what laughter we shall attack him. He speaks of his imagined celestial images as being created with only a few stars, rather than created complete, lest from more sky-fires the world would burn in a mighty conflagration.

I do not lower myself to attack the younger men, the common and the ignorant, to whom – as if they were the rightful possessors – almost the entire profession has devolved. Among them, Guido Bonatti is held as the highest authority. He is not only ignorant of philosophy but is truly mad and delirious.

Read his first book, *On Judgements*, in which he himself writes the preface. I am lying if you do not judge him worthy of hellebore or some other medicine. When he errs less dramatically, he constructs certain arguments by which he seeks to prove the truth of astrology. What shall I say of those arguments? They are false.

Indeed, they beyond childish and ridiculous. How very effective Bonatti thinks this is: that the quadrivium would be destroyed if astrology were removed from the curriculum, for it is one of the four mathematical arts. He does not even know this very thing he professes! For divinatory astrology, which we refute, is as distant from the mathematical sciences as light is from darkness, as truth is from lie.

Astrology, which lays claim to predicting future events, cannot stand if that earlier and truer form of the science [astronomy] were removed; but it does not follow that, with the divinatory branch removed, mathematical astronomy would also be taken away. This is so clear even to those with the most superficial understanding of these arts, it is unnecessary to explain further.

Ptolemy himself, in the preface of the *Apotelesmata*, describes a twofold astronomy, referring to his discourse on the older mathematical branch. He says thus:

"There are two main and most significant methods, Cyrus, by which we arrive at astronomical predictions. The first, which holds the primary place both in position and power, is the method by which we determine the configurations of the movements of the Sun, Moon, and stars, both in relation to one another and to the Earth. The second involves the effects of those configurations and everything that follows from them."

Even if, by chance, divinatory astrology has garnered support from among good judges, it does not immediately follow that something is good simply because some good person approves of it. Not all good people are consistently good in every way. Few fully deserve the title of 'learned' in every respect. And if one is to learn anything, not all the learned are philosophers, while philosophers are always learned.

But it is also necessary to remember there are certain truths against which our desires struggle. In one category are those truths pertaining to moral and theological matters. In a second category lie those truths pertaining to the physical and mathematical. The vanity of astrology clearly belongs to the first category, because the innate flaw of curiosity resists acceptance. Curiosity is most powerful, and is inherent to man insofar as he is human. Sometimes it stops many investigating the truth or, even once truth is discovered, curiosity renders them unwilling to accept it.

After a philosopher has laid out the clearest arguments against greed, many still long to amass wealth. So too do people struggle to detach themselves from astrology due to innate curiosity, even once they understand astrologers' claims cannot truly be valid.

As we eagerly listen to myths out of a desire for new stories, so too, curious about the future, we listen with pleasure to astrologers, even though they lie. Excessive self-love deceives us, making us quick to hope for or fear anything related to ourselves. It constantly

drives us to seek out such things — even when we know they cannot truly be found. Thus we are led blindly again and again by this longing.

Moreover, due to long-standing widespread acceptance of astrology, many assume almost by default there must be some truth to it. Yet it never occurs to them to examine what real foundation or solid basis this belief rests upon.

You will generally find those captivated by this vanity have either been poor philosophers or, at the very least, poor astrologers. The former wish to avoid seeming ignorant. The latter wish to avoid being judged poor. Astrology may appeal to some as a superficial taste. But, once deeply drunk, it has never satisfied the palate of a true philosopher.

On its surface it has something that attracts, something that seems grand, plausible, and useful. When you look deeper, you see everything is false, uncertain, and fabricated, arising from no evidence or else from very weak conjectures. We shall discuss this in depth in the following books. But perhaps some have also been misled, on account of the names of certain philosophers and astrologers being similar. Some might think the same people wrote both philosophical and astrological works.

For there is an Albumasar among philosophers, and also among astrologers. But although the Latin language has confused these names, among the Arabs they are different. The philosopher is called Abunasar, while the astrologer is called Aboasar.

Abubater wrote on the predictions of nativities, while another of the same name wrote on philosophical matters, particularly the book *How Each Person May Become a Philosopher by Himself*, which we translated from Hebrew into Latin last year. But the former writer is Alchasibi, while the latter is indeed the son of Tofail. There is often similarity in names, even though there is vast difference in historical eras, and in fields of study.

But enough about philosophers; let us pass onto the prophets, that is, to the oracles of the Old and New Law, beginning with Isaiah.

Isaiah menaced the Babylonians with a doom of future destruction. Among the Babylonians the sect of astrologers flourished greatly, to the extent the astrologers were also called Chaldeans. Invoking Cyrus, the king of Persia, the anointed one, two hundred years before he was born, and stirring him to fight with many trumpets, Isaiah addressed the city of Babvlon itself, now destined to be laid waste in wrath:

"Let now the augurs of the heavens stand and save you, those who contemplate the stars and calculate the months so that they might announce to you what is to come. Behold, they become as straw; fire consumes them, and they will not save their souls from the hand of the flame."

Before these words, with a few remarks interspersed, he had already censured the Babylonian astrologers, concerning their observation of the heavens:

"Your wisdom and knowledge will deceive you. An evil will come upon you, and you shall know not its origin. A calamity shall rush upon you, for which you cannot atone."

In these words, the divine prophet accuses the astrologers of a double rashness. The first is that they think they can foresee the future from the sky; the second, when those futures are foreseen, is that they think they might drive away evils or affirm goods.

Therefore, Isaiah says, "an evil will come, and you shall know not its origin." That is, an evil which neither Mars nor the cold star of Saturn will have signified. Then "you shall not be able to atone for the calamity that rushes upon you." That is, they cannot drive away disaster by the selections of hours and astrological images, or by other superstitious devices.

It is necessary, however, to refute those who wish to be both Chaldeans and Christians. Such people habitually argue the field as a whole is not condemned by the saints and prophets. Rather the condemnation is reserved for those who relate vices or virtues to the

heavens, or who bind human affairs by appeals to fatal necessity. Therefore, we must not abhor the knowledge of astrology, but only the errors of certain bad astrologers.

Let Pierre d'Ailly, and whoever else uses this defence, say to me whether it pertains to morals if the king of the Persians wages war upon the Assyrians. And if it does not pertain to morals, why did the Prophet think it could not be foreseen, even by the greatest astrologers? Moreover, if the astrologers had merely fallen into the error of believing that future events were necessary, Isaiah would not have emphasised the unavoidable nature of the calamity, since the astrologers themselves would not have hoped to avert it. Rather they would have believed it inevitable.

Nor by any sound judgement are good arts condemned, merely because certain bad individuals abuse them. Otherwise, the reading of sacred letters would have to be condemned first, on account of the ignorant and the proud deriving so many heresies and insanities from the text. Likewise, philosophy would have to be condemned because one philosopher claims the soul is mortal, or that all beings share one soul. Others deny that God provides for mankind, and others deny any religion whatsoever. By this reasoning, all good things would be overturned, since nothing is so sacred that human nature cannot abuse it.

Therefore, those astrologers who defend themselves this way slander the judgement of the Church. They are ashamed to reject the Church openly, even as they indirectly disparage it. But they can certainly be compelled to reject this vanity, or to avoid deviation from their elders – that is, the leaders of the Church – via avoiding the 'left path' of error.

Given the reasoning the Church has used to condemn astrology, let the astrologers say, please, whether the condemnation is just or unjust. They do not wish to call it unjust, but if they consider it just, why do they not equally condemn astrology?

The astrologers say, "We condemn those errors on account of which astrology displeases the Church."

But I ask this: why do those errors not displease the astrologers for the same reasons? For the Church does not merely forbid astrology in part, but utterly attacks and abhors it, as we shall soon show.

The astrologers contend the Church's condemnation is on account of certain errors. Granted. But let them answer this: is it a right judgement that the whole of astrology should be rejected on account of those errors? If the judgement is correct, why do they not abide by it? On the contrary, what the Church has condemned, they approve; what the Church has attacked, they defend; what the Church has forbidden, they spread; what the Church does not wish known, they publicly teach.

Or is it, as Pierre d'Ailly says, that astrology might have harmed a growing Faith, and so the first teachers of the nascent Church attacked it. Now the Faith is mature, astrology does not harm it, but rather benefits it, greatly.

This argument will later be refuted, for we will plainly show that astrology is now, as it was formerly, pestilent. Experience itself demonstrates this.

But let us address the notion that the thing itself ought not to be condemned, but only its misuse. Why do we not condemn philosophy for the impiety of certain philosophers, when we condemn not only astrologers but astrology itself?

Because in philosophy, error is the fault of the professor; in astrology, the profession itself is a fault. Following authority and reason, and disputing impiety, we refute not philosophy, but the errors of philosophers. Applying the same method here does not merely refute astrologers, but astrology itself, since astrology itself is an error.

Let us now return to the testimonies of the prophets.

God thus speaks to us through Moses: "The Gentile nations hearken to soothsayers and diviners, but you have been instructed otherwise by the Lord God." However, instead of what we read as 'soothsayers,' in Hebrew it is *mehonen*, which Achinnas, the greatest doctor

among the Hebrews, reads as meaning ‘those who calculate times and observe favourable and unfavourable hours’ (for that expression is derived from *hona*, which signifies ‘hour’).

St Jerome translated the term as *augur*, and we have also seen astrologers called *augurs* by Isaiah. For the name *astrologer* is nowhere in the holy scriptures. The term itself has various synonyms, and the superstition has received different names at different times. Formerly, they were called Chaldeans and *genethliaci*. In St Augustine’s times, they were mathematicians and planetarians. Now they are commonly called astrologers.

But what St Jerome frequently translated as *diviner*, in that passage and elsewhere, is in Hebrew *chesem*. Ibn Ezra himself, although an astrologer, says this term is indeed common to all forms of divination, but is more properly a name for astrologers. Who does not know that passage from Jeremiah: “Fear not the signs of the sky which the gentiles fear”?

Why, therefore, should a Christian man either rejoice or be saddened by the judgements of astrologers? Isaiah says there is nothing to hope from them, Jeremiah says there is nothing to fear from them, and through both Divine Truth is affirmed. As St Ambrose says, seeking after all that the astrologers profess is absurd, given that they promise the impossible.

Thus, the Ruler of Heaven says in the Book of Job: “Do you know the right order of heaven, and will you impose its reasoning upon the earth?” and also, “Who will declare the reasoning of the heavens?”

For the astrologers fall into twofold error. Firstly, they claim many things on earth are subject to the heavens when those things do not depend upon the stars. Secondly, even those earthly things which the heavens do bring about cannot been foreseen as astrologers believe.

The words in Job show us this. Since the teachers of the Church refute both errors equally, how can it be said that they only disapprove of that which would remove the freedom of choice or bind humanity by the chains of fate?

Does not St Augustine's argument about twins deny astrologers all knowledge of future events? In his *Enchiridion*, does Augustine not say that connecting time with fortune – such as believing some times favourable and others unfavourable – is itself a great sin? Even though in choosing hours and days, we exercise freedom, rather than suffer its removal?

But so it is; indeed, astrology displeased the teachers of the Church in every respect, especially that part where it subjugates religion and morals to the heavens. This, they abhorred, refuting it everywhere. Here, they judged it impious, everywhere vain; here, blasphemous, everywhere superstitious; here, abominable, everywhere ridiculous.

Therefore St Augustine, in the book *On Christian Doctrine*, says those who are called *genethliaci* are guilty of pernicious superstition. Not only because they think the stars determine our actions, but also because they believe the heavens govern the outcomes of our actions. In the book *Confessions*, he speaks of the planetarians, that is astrologers, and says true Christian piety both expels and condemns them. He further clarifies the statement of Moses, that "the stars are set for signs and times." Augustine says Moses does not speak of astrological signs, which are vain to observe, but rather the signs necessary for everyday life. For example, the stars utilised by sailors and farmers.

Taking the same stance, St Basil of Caesarea called astrology a most preoccupying vanity. St Ambrose considered it useless and impossible. Theodoret thought it refuted by philosophers. Chrysostom deemed it vain, false, and ridiculous. Let us read Bardesanes, Eusebius, Didymus, Apollinaris, Tertullian, and countless other apostolic men. Why say more? Let us now see the Hebrews, heretics, and pagans attack this same breed with the censor's rod!

St Augustine marvelled that, even as frequent testimonies reproving astrologers were read in churches, Christian gatherings were still filled with people who consulted astrologers over the timing of actions. Likewise, when he was preaching on the third verse of psalm sixty

[Vulgate numbering], he presented a repentant astrologer, who had clearly renounced his profession, no differently than if a Jew or a pagan had received the waters of baptism. How beautifully does Augustine interpret the Gospel of John, and warn us of our madness, we who go freely to astrologers only to leave as slaves. For having purchased lies, we hand over to them our very freedom.

In the book *On the Nature of Demons*, Augustine expressly says that no one after Christ is permitted to interpret, by means of the heavens, the natal chart of any person. St Jerome says that studying the courses of the stars in order to discern future events is among the disgraces of Egypt, that is, a relic of idolatry. Severian, in the book *On the Seven Arts*, which Roger [Bacon] falsely attributes to Cassiodorus, speaks about true astronomy, and then says: "Those things that pertain to foretelling future events ought to be so unknown they should not appear in writing; for they are without doubt contrary to our faith."

These are his words verbatim.

If the opinions of so great and distinguished men do not move certain people, then let at least the authority of the Pontiff deter them. This forbids astrology to our people in such a way that Pope Alexander III, the Supreme Pontiff, ordered a certain priest to abstain from the ministry of the altar for a full year. The priest had used an astrolabe to investigate a theft from a church. The same Pontiff attests the priest had partaken neither in magic nor other superstition.

In the written documents arising from Pope Martin's synod, it is stated that true Christians are not to observe either the courses of the Moon, or the stars, or the vain deceit of signs, for the purpose of building a house or contracting marriages. Also, under the name 'soothsayers', to be an astrologer was declared anathema by the decree of Pope Gregory the Younger. And in the Council of Toledo: "If he himself is a priest or deacon, he shall be sent to the monasteries, there to undergo punishment for his crime in perpetual condemnation."

For, as St Augustine teaches in the *On the Nature of Demons*, those who keep track of days and hours for conducting business are usually designated as soothsayers. That part of astrology concerning elections seems particularly of note.

Who then dares among Christian men (for my discourse is directed entirely at Christians) to defend, follow, or extol astrology, which is prohibited by law, condemned by the prophets, mocked by the saints, and forbidden by pontiffs and most holy synods?

You may present me with the counter-example of Albertus Magnus, a most eminent theologian yet also a supporter of astrologers. I would however remind you that many works are attributed to Albertus which are not his, as I touched upon above. You may also cite the book *On What is Lawful and Unlawful*, which indeed rejects magicians, yet approves of astronomers as authorities. I admit that many think this work is of Albertus, but neither Albertus himself nor the title of the book identifies authorship. The author, whoever he actually was, deliberately and explicitly conceals his own name.

Why? Because in it we read many things unworthy of a learned man and a good Christian. For example, the claim that artificial images can render not only one man, but even an entire city, fortunate or unfortunate. Furthermore, that magical books should not be discarded, because they might prove useful to the Church at some time.

This is clearly contrary to the judgement of the Church, which orders such texts burned and completely exterminated wherever they may be found. By what reason would it prove useful to preserve entire books, when they would have been more useful if they had never been written? Albertus did not write this work, or, if he wrote it, it must be said after the manner of St Paul the Apostle: “In these I praise; in this I do not praise.”

Just as it is the mark of envy to seek in great men that which you might blame rather than what you might praise, so it is the mark of madness, if they have failed in any respect, to imitate rather than condemn. I, for my part, praise Pierre d’Ailly’s devotion to letters, his

experience in affairs, and his extensive reading. He wrote and treated certain theological matters wisely and subtly; but in one work he wished to reconcile astrology with history, and in another with theology, so that in one he might prove astrology true, and in the other pious.

I do not praise this. Rather, I condemn, curse, and abhor it, since I cannot defend any position so false or opposed to religion. We will discuss this at length in the following books, so nothing further need be said here. We shall prove, even to Pierre d'Ailly's supporters, that his little books are hostile to religion and full of many historical and astrological errors. Our familiar saying may indeed be applied: "if you wish to remove error, remove the book."

We have spoken of philosophers and prophets. Civil laws remain, that is, the commands and judgements of Caesars and wise men, whose chief aim is to ensure human life may be pursued happily. This life is greatly aided by beneficial arts, but is disrupted by harmful ones. Hence, these lawmakers have ensured beneficial arts flourish in abundance, while harmful arts, as far as possible, have been driven from the community. To this end, civil laws decree rewards and honours for the teachers of the former. They decree public disgraces and punishments for practitioners of the latter; the more harmful the art, more severe the punishment.

No one is unaware of what these lawmakers thought about astrologers. One only has to read the legal codes of Emperor Justinian, in which the art of the mathematicians – so the astrologers call themselves – is prohibited as abominable. The Emperor commands that no one may consult a mathematician, but that all are to forever silence their curiosity.

If anyone were to consult a mathematician, the penalty of death – the highest punishment – would be announced to him. The most wise Emperor, skilled in both law and judgement, would not have imposed this penalty unless experience had proven astrology not merely useless but genuinely harmful. Justinian himself so greatly dreaded this profession,

that if a mathematician were discovered among the Imperial retinue, the man would suffer the most extreme tortures, even the rack.

In further dealing with this superstition, the Emperor declares that those who teach and those who learn are equally guilty.

Before Justinian, do we not also read that all mathematicians were often expelled from the city of Rome? We shall demonstrate this in our conclusion.

But if divine brilliance indeed illuminates all correct reasoning, then correct judgement condemns astrology. That which the wisest lawmakers have banished, the most learned philosophers have refuted, and the most holy and godly men have abhorred.

Here ends the first book of Giovanni Pico della Mirandola's Disputations Against Divinatory Astrology.

Disputations Against Divinatory Astrology

By Giovanni Pico della Mirandola, Count of Concordia

Book Two

Chapter One

That this art is uncertain, even in the judgement of its authorities.

But we shall not argue from authority alone. Rather, we will demonstrate in this work, with sound reasoning, that the saints are right to reject this superstition. Astrology is indeed a great foe of religion. We will also demonstrate that its legal prohibition is advantageous to civil society, because astrology is useless to life; nay, harmful and extremely noxious. And it shall be further shown that philosophers are correct in refuting astrology through reason. Astrology is both false and uncertain.

Although it seems we ought to begin with this, so that the falsehoods of astrology might be immediately established, and the field thereby vanquished, I have decided to proceed differently. Before discussing falsity, I shall show the lovers of astrology that, even if this profession were as they assert and affirm, no benefits would accrue for the outward man. Meanwhile, the inner man suffers not only harm, but even deadly injury.

It is first necessary to discuss how the supreme leaders of the astrologers regard their own profession.

In the first book of *Apotelesmata*, Ptolemy states that the judgements of astrologers are often false due to the fault of the predictor, and further adds the following words verbatim. We translate the phrasing ourselves because it is distorted in the common

translation and even worse in Avenrodan's (and is poorly interpreted by him); but when the words are faithfully rendered, they need no interpretation:

"It is clear, even if someone pursues these disciplines as rigorously as possible, he must still often err – not due to the things mentioned above, but because of the nature of the subject itself, or because our weakness is too great for the magnitude of such a profession.

Indeed, all contemplation that concerns matter grasps probabilities rather than truth. That is especially characteristic of this, a mixture of many disparate elements, and of dependence on ancient figures and wandering stars. We must adapt what the ancients observed to our own age, whenever our situation resembles theirs.

But though the figures themselves might seem more or less similar over long cycles of time, the exact concord of the heavens and earth, a return to the past alignment, is not to be hoped for – unless, perhaps, someone vain and boastful prides himself on understanding those things that cannot be fully comprehended by their very nature. Or at least not within the time span allowed to human senses.

Hence it happens that sometimes there is error in predictions. In observing the things from the surrounding world, there is nothing difficult. However, in the birth and private comparison of individuals, character is shaped by no minor cause.

The difference in the seed greatly affects the properties of a species. Even if the environment and other determinative factors are held constant, the seed has great significance in shaping a particular form, whether it be man, horse, or other. Also, geography causes no small amount of differentiation. For if human seed and surroundings are kept the same, due to diversity of geographical region those born can differ greatly in body and soul.

What foods people consume or what customs they follow, also greatly matter for varying the course of human life, even if other things are held equal. But if these factors are not contained within wider environmental causes, then in those very things, there may be

some part of the cause for the overall effect. On the other hand, when the opposite happens, those who think they know everything may have ample reason to hesitate. Things are not exactly the same, yet some people believe they can discern matters solely from the motion of the higher bodies."

In the first statement of another book titled *Fructus*, commonly referred to as *Centioloquium*, Ptolemy speaks about those learned in astrology, saying:

"The wise man cannot determine the particular forms of things, since the senses do not grasp the particular form, but rather the universal form of the sensible. It is necessary for one who deals with such matters to use conjectures. Only those inspired by the divine can predict the particular form of things."

This he says word for word, although in the common manuscripts the phrasing is different, distorted and corrupted. But the unambiguous opinion of those Arabs and Hebrews who write about astrology is: whatever a star promises might not come to pass, because the subject may not be suitable for the celestial influence.

Moreover, human actions depend greatly on free will, and a particular fate is sometimes overcome by a more general adverse fate. Divine Providence, mightier than fate and greater than the heavens, sometimes arranges events contrary to the ordinary movement of the stars. These views, though scattered among astrological writings, are all cited as laws in Avicenna's work, in the first chapter of his book *On Nativities.*

Chapter Two

Auspices, which they call elections, are shown to be useless by the testimony of an astrologer, as well as by reason and experience.

If astrology be true, let the astrologer unveil those benefits to life that derive from his predictions. He may, perhaps, respond with two claims.

Firstly, we determine the hour by which we ought to time our actions, so what we undertake is undertaken successfully. Secondly, by predicting the future, we know in which matters we are likely to be unfortunate. Thus we might avoid misfortune, while we pursue those things in which our natal hour promises happiness.

Let us examine each point, beginning with the first. And, since our dispute is with the astrologers, let us utilise those premises they regard as true.

When you undertake an action under an omen, the stars of your birth have made the heavens favourable to you, or else unfavourable. If unfavourable, choosing an auspicious time is of no benefit, according to Ptolemy, because you will always approach the matter unhappily and will thus avoid it. If favourable, there is no need for choosing auspicious hours, for your own action is sufficient. You will undertake the matter successfully, for your spirit urges you towards it.

To be fortunate – if one is indeed rendered fortunate by the skies – is nothing other than the heavens moving our imaginative faculty, the servant of reason. Specifically, we are moved so that we undertake each action with those means, and at those times, through which our desires may be fulfilled most successfully. Therefore, Aristotle says advice does not benefit the fortunate. Advice may draw them away from the course to which nature was calling them.

I omit Haly Avenrodan, the interpreter of Ptolemy, who says the part of astrology which deals with elections is trivial and ineffective.

I omit the very credibility of experience, more certain and reliable than any other knowledge. Indeed, experience shows daily that those least successful in managing their own affairs are precisely those who observe a vain discernment of ‘auspicious times’.

On the contrary, those who reject this superstition, and rely on the guidance of their own choices and own prudence, prove far more fortunate. Who in our time has proven more fortunate than Francesco Sforza? Through his military success, he secured for himself a vast and flourishing dominion in Lombardy, and left it expanded and fortified for his descendants.

Yet to Francesco Sforza, all astrologers were either hateful or contemptible. Nor would he ever employ them as advisors in his military or domestic affairs. Who among the ancients was more powerful than Zoroaster in astrology, magic, and all superstition? And yet Ninus, neither an astrologer nor a magician, defeated and killed him in battle.

Pompey placed great trust in the responses of diviners, while Caesar placed none; to Pompey came adversity, while Caesar enjoyed a favourable and happy fortune. Who does not know that Emperor Justinian – as we have seen, the destroyer of astrologers – was highly successful, both at home and in the field? By contrast, Emperor Julian the Apostate, enemy of the Christian faith, and a most curious observer of every superstition, in a short time suffered the unhappy loss of both his life and his empire!

I could cite one or two learned astrologers, familiar to me by name, to whom faith in that vanity – to which they had indeed bent their life – represented either their ruin or a source of no small harm. I do not wish to defame otherwise good men, nor violate the rights of holy friendship in this matter. But would that one man had not lost his patrimony to it, nor the other his country and his life! Would that through vain hope, many had not been made foolish and insane, nor miserable through fear!

In this, may God not see my crimes. I have seen no people more destitute of the things astrology promises than those who have completely devoted themselves to it. Those who seek the favour of the heavens at every hour.

A certain great man, well known to me, changed his life and took up astrology. Having earlier suffered a significant loss, he felt hopeful, and believed in this new profession

he would attain success through celestial favour. In fact, he daily experienced more and more ill fortune. He used to say Mars had deceived him, not wishing to admit the truth, which was that he had been deceived by the vanity of astrology. Soon afterwards, he died a most miserable death, one he had not foreseen from studying the heavens. He was preparing many things, and undertaking great enterprises, for he still thought he had long years of life ahead.

I could recount other such examples, but my spirit recoils from the narration of things I can scarcely recall without tears. Moreover, since these cases involve very dear friends, they earn my sympathy more than my criticism.

May this reluctant admonition – names withheld – of old friends benefit my still-living friends. By all the bonds of friendship between us, by their own fortunes, by my hopes for their happiness, I wish to warn and implore them, again and again, that they may never entrust their affairs to the guidance of such vanity.

Let them regard astrology, if they so wish, as a poetic tale to laugh at, to play and joke about; but not as a guide, and not as a teacher of life.

When the body's health needs tended, let a man consult doctors; when external matters need attended, let him use the eyes of prudence and reason. Divine wisdom teaches that the physician is created by the Most High for our need, and that prudence keeps a person from the wrong path. Nothing similar is written of astrology, and we have so judged the profession useless, though we grant it no more weight than astrologers themselves believe it deserves.

When it has been proven that astrology contains no truth, the danger of entrusting one's affairs to the counsel of astrologers shall lie beyond all dispute. Should astrological predictions come to pass, their correctness must not be attributed to reason – there is no reason behind such predictions – but rather to chance and randomness.

Chapter Three

Astronomy is not useful in determining what should be done or avoided.

The second alleged benefit of astrology, as we mentioned above, is that we should pursue what the astrologer instructs us to follow and avoid what he forbids. But this is either superfluous or harmful. For what he predicts concerns either the body or else concerns external and chance events. If the matter pertains to bodily health, I ask whether the astrologer's judgement should agree with the physician's judgement. If both agree, the astrologer contributes nothing the physician alone could not provide. If they disagree, to whom, I ask, should we give preference?

Certainly, if by rejecting the physician and relying on the astrologer, you entrust yourself to madness, you will pay the price for your folly. Likewise, in practical matters, I ask whether prudence advises doing what astrology recommends. If prudence and astrology agree, why should we search the heavens for something that resides inside us? If they differ, who could reasonably defend leaving prudence behind in matters of action – a prudence that is nothing less than the government of action by right reason?

These points shall become clearer with examples. Suppose an astrologer predicts Mars will threaten you with a fever this year. It will supposedly stir up bile due to its influence in the annual cycle. Therefore, the astrologer advises cooling remedies and adopting a lifestyle that counters Mars' heat.

So the astrologer forewarns through the heavens. The physical signs themselves – those based on the body, and upon which doctors' diagnoses rely – will either agree or they will disagree with that assessment.

If the physical signs agree, you will have enough evidence to take precautions against future illness. If they do not, would it be right to act on the astrologer's prediction of bile

excess when there are no signs of it? If there is no rising bile, but rather cloudy, thick urine, slow pulse, facial pallor, sluggishness in the limbs, and other indicators of phlegm's dominance rather than bile? Would you still purge bile, because the astrologer has imagined Mars threatening you?

Furthermore, the astrologer cannot prudently advise you, even if he correctly predicts the effect of Mars. Your natural temperament, the general conditions of that year, or the lifestyle you maintain may well outweigh the heavens. The astrologer sees only one cause producing an effect, a distant and general one at that. The physician, by contrast, not only judges from specific and immediate causes, but perceives the matter with his senses. He diagnoses from the combined effect of all causes, with nature herself giving present and evident signs.

Let us grant that even those who favour astrological judgements are not so unreasonable as to consider them superior to those of physicians. We may propose a similar example regarding external affairs.

Suppose an astrologer advises a prince against waging war on his enemies, since Mars is not particularly favourable. I ask whether, at the time of this advice, there is no just cause for the prince to wage war. Or whether there is just cause for waging war, but no favourable conditions for victory exist. Or whether there is both a just cause for waging war and all that is needed for victory is available.

In the first scenario, the prince will not go to war, but prudence alone will lead him, even if the astrologer remains completely silent. Where there is just cause and all the instruments of victory are in place, not even the astrologer himself, if he has no personal interest, would argue for avoiding war. If the prince still abstains, he would abandon sense and evidence in favour of abstract conjecture and speculation.

Chapter Four

Astrology is so not useful to religion as Roger Bacon and Pierre d'Ailly have thought.

But if astrology is useless for life, is it perhaps useful for religion? This seems to have been believed by both Roger Bacon and Pierre d'Ailly, and indeed for two main reasons.

Firstly, the matter of the great conjunctions. The true number of years from Adam to Christ might be derived from such astrological computations. There is significant dispute in ecclesiastical records about this.

Secondly, the oracles of the prophets might be confirmed, if the testimony of astrology were added to their predictions. Since all truth is in harmony with all truth, it necessarily follows that the truth of astronomical science must be in agreement with theological truth. Indeed, above all other sciences, the study of the heavens serves as a handmaiden to a theological mistress, since God's invisible things are seen through visible things. Nothing is nobler than those objects in the sky, whence comes that Davidic statement: "The heavens declare the glory of God, and the firmament proclaims the work of His hands."

Intending to confirm this in his work, Pierre d'Ailly wrote a small treatise, divided into twenty propositions called 'words.' There are plainly as many errors as words. The title is *On the Harmony of Theology and Astrology*, as if he had not read St Paul exclaiming, "What fellowship has light with darkness? What concord has Christ with Belial?"

In this work, our author aims to accomplish two things: to show the predictions of the divinely-inspired prophets were prefigured by the heavenly constellations. And further, to calculate the years from Adam to Christ according to the doctrines of astrologers.

He adds a second little work, *On the Harmony of History and Astrology*. Here he notes the seven greatest conjunctions from the beginning of the world. He seeks to relate

them to major historical events, intending to confirm the doctrine of the astrologers, who claim these great conjunctions mean dramatic changes in human affairs, laws, and kingdoms.

Would that d'Ailly had written works more worthy of praise than refutation. He had a talent for letters, and I appreciate and respect the role he played within the Church. But perhaps I do him a favour if his incautious material, or that which he falsely wrote as being beneficial to the Church – it is undoubtedly harmful – were erased to the extent of our power, by this just refutation.

What led this otherwise learned man into such error was primarily his ignorance of astronomy. After his theological studies – in which he had trained at the most celebrated Parisian academy – he began to explore the science a little in his old age. Enticed by the splendid appearance of the astronomical art, which speaks of the greatest matters, and which human curiosity above all desires to know, he wrote those two cited works.

Works too hastily written indeed, and penned before he recognised the weakness of his doctrine through deep examination. Having become somewhat repentant, he later retracted, and then revised many things in that little book which he calls the *Elucidarium* – although there remain many obscurities therein.

If someone unlearned in astronomy should read those little books, the less the reader understands of the subject, the more he will marvel. One who has even moderately progressed in the art will judge d'Ailly a writer rather than an astrologer, for his writings merely reflect his reading, rather than any deep understanding. Almost everything in those books is taken verbatim from Roger Bacon, Abraham the Jew, Henry [Bate] of Malines, Albumasar, or a summary by a certain John the Briton.

D'Ailly himself was only a listener, with little learning in astronomical matters. In chapter eleven of his *Elucidarium*, his most careful work, he says at the time of writing, in the year 1404, we were in the Airy Triplicity and would remain there for another sixty-one years.

That is, until the year 1465, when then there would be a great conjunction of Saturn and Jupiter, along with a change from the Airy Triplicity to the Watery Triplicity.

But that change had taken place nearly forty years earlier, in A.D. 1365. On the 29th day of October, Saturn and Jupiter were together in the seventh degree of Scorpio, and they have continued to join in watery signs up until the present time. Our d'Ailly's calculations were almost a hundred years in error, awaiting an event in the future that had already happened.

We have refuted thoroughly the other benefit d'Ailly thought could be derived from astrology, namely determining the true number of years from Adam to Christ. We have done so in the book *On the True Calculation of Time*, although if astrology were to aid Christendom on this matter, it would not be the kind of star-study we oppose. That is, it would not concern itself with the prediction of future events, but would rather be true astronomy, one of the liberal arts, which calculates times and measures the motions of the stars by mathematical reasoning. But we shall address d'Ailly's further errors in the following books, rather than here.

For there, in regards to the harmony of philosophy and theology, we will show that what the prophets proclaim is not signified by the heavens. Even if astrology were true, the prediction of such matters does not pertain to it. Those things, to the extent they are beyond nature, stand exempt from the influence of the heavens. Insofar as there is something natural in them, and the astrologers claim such events are caused by and can be foreseen through the heavens, we will show their words ring hollow, though they appear profound.

Prophetic oracles cannot be usefully confirmed through astrology, so much so that nothing could weaken religion more powerfully and effectively. Those who attempt such confirmation of the prophets are always liars and unlearned in astronomy, and they err greatly in their historical claims.

This is not only true in matters related to laws and divine miracles, but also in other human affairs, which many have wanted to predict from the so-called great conjunctions. There too, we reveal the vanity and falsity of the astrologers' doctrine, and thus we will contend for the truth with Albumasar, the originator of this error, with Henry [Bate of Malines], his interpreter, with Abraham the Israelite, and with John of Oxford.

Indeed, we will refute Peter d'Ailly's book *On the Harmony of History and Astrology* from beginning to end. Proceeding from the first cited conjunction to the last, we will show that nothing concerning heavenly and earthly matters is sound or close to the truth. Nor have those seven conjunctions occurred at the times he thinks. Each differs greatly within the very chronology, that is, between the author's narration of events and true calculation.

But let us also examine his additional points, to see whether they contribute anything.

All truths are in harmony with one another and the heavens declare the glory of God. Certainly, this is very true, but since astrology is false, it cannot be in harmony with theological truth. St Paul teaches that the testimony of David should refer to the heavenly minds of the apostles, who indeed declare the glory of God, of which it is later written, "the law of the Lord is immaculate, converting souls."

Even if David's verse refers to the visible heavens, if the heavens declare the glory of God, why should they declare the supposed glory which astrologers invent? The invisible things of Him, His power and divinity, are indeed understood through visible things, but this understanding belongs to the philosopher. It is the philosopher's role to study the order, movement, and nature of the heavens, and thereby rise to appreciate the invisible divine Creator. The astrologer looks at the heavens reluctantly and turns his gaze down to the earth; only the philosopher contemplates the invisible through the visible.

Chapter Five

How harmful astrology is, and how destructive to the Christian religion.

Observing matters more broadly, when I examine the enemies of the Church, I see no greater supplier of resources, no greater supplier of swords, to the war against the truth than this profession. From astrology comes an easy and headlong descent into impiety, false religion, heresies, vain superstition, corrupted morals, and irreversible wickedness. How might impiety more readily arm itself against the weaponry of religion than by attributing divine miracles – through which all Faith is confirmed – to the heavens?

If you deny the Christian martyrs who scorned death, or the few, poor, uneducated apostles who subdued the world to the Gospel law, or even the people returned from the dead, if you deny that which is greater than human, better than anything done by a demon – if you deny the power in those things, attributing it instead to a star or heavenly influence… would this not bring an axe to the very roots of religion? If astrology persuades, does it not destroy religion and completely exterminate it? But if you argue this is not the fault of the art but rather of erring individuals, I will admit it is so. I was not calling this the error of astrology itself, but rather noting the ease of slipping from astrology into religious error.

Nor, if astrology were true, would I abandon the duty to divert people from that danger. No truth should be confirmed by lies. But since astrology is false, its falsity shall be exposed, for if people thought it true, it could generate a grave pestilence in the minds of the uneducated. Although, given that all professors of any art share the same vanities, it is hardly unfair that blame should indeed be attributed to astrology itself. Among the chief writers on astrology, there is no one I have read who does not subject religion, laws, and other human matters to the constellations of the stars.

In the second book of the *Apotelesmata*, Ptolemy says the worship of one deity in one nation and the worship of another deity in another is the product of the different stars and

images that govern different peoples. A certain Greek interpreter of Ptolemy claims the miracle of Moses and his people crossing the Red Sea happened because Moses observed the advance and retreat of the sea. As if the entire Hebrew people did not cross at the same time unharmed, with dry feet, and Pharaoh did not drown with all his astrologers. As if Joshua did not cross the Jordan with dry feet, in a place where the astrologers imagine no tide, and no ebb and flow of waves.

But we have refuted all these absurdities elsewhere. Albumasar the Arab similarly derives the law of the Saracens, his own people, but also our laws, and all laws alike, from the heavens. He declares which constellation established each law, and for how long each law shall endure, based on that same constellation.

How little truth or science are to be found in these claims, we will show later. Albumasar's interpreter, Henry [Bate] of Malines, even claimed to have found a ship in the sky, on which Noah supposedly based his ark. D'Ailly greatly admired this, as if it were a divine discovery.

Such writers reduce the law to a matter of natural courses, or changes in the heavens. They use the heavens to determine the years from the law's beginning to its fall. Haly Abenragel, never mind others, predicts annual prosperity or barrenness. If the Ascendant of the law applies to the location of Jupiter and Venus, a fertile year is expected; expect otherwise if the Ascendant applies to the location of the unfortunate stars.

Abraham the Jew – not he who is called Avenazra, as d'Ailly mistakenly believes, but the one they call Nasi, that is, the Patriarch – attempts to relate the Mosaic Law, the Exodus of the Jews from Egypt, and everything that happened to the Israelites to conjunctions, in a clumsy and ridiculous manner.

If only these writers had not perceived the light of this ‘truth’ amidst the darkness of false religion. If only our people, amid the splendour of the Gospel, were not so blinded, and did not think worse of our religion than these others thought of theirs!

Guido Bonatti the madman claims the Lord Jesus used the selection of auspicious hours. When the apostles had agreed that he should not return to Judea, Jesus replied that there were twelve hours in the day. Bonatti says Jesus chose an hour in which the Jews could not harm him. As though Jesus had not prostrated the Jews when he wished. As though he had not been better hidden while passing through them in the light of day.

I omit how rashly and blasphemously Bonatti speaks of the divine family of Francis, and how he fabricates the idea that the miracle of divine love was the work of Mars. But why do we seek out such remote matters? In prophecies concerning the events of the years, disseminated daily in public, isn’t it also claimed that Christian law is perfected by the doctrine of Christ and Mercury, and that even the religion of Jupiter receives purity from the Virgin?

Christian eyes read these things, and somehow do not take offence. In the preface of some treatise arguing against Gerard, it is also written that, when the election of a new pope is under discussion, one should devoutly pray for the Mercury star to temper matters with its holy ray.

The astrologers claim our law is subject to Mercury, and thus they have called the people of Christ ‘Mercury’s people.’ I do not know how any Christian man could hear this with equanimity. Roger Bacon writes that those Christians who do not rest on the Sabbath, and abstain from work in the Jewish manner, are in error. Since that is the day of Saturn, a star considered ill-suited and ill-omened for important matters.

With these words, Bacon not only accuses Christians, but even makes Moses an astrologer rather than a prophet. According to Bacon, Moses' establishment of Sabbath observances derives not from some divine mystery, but from astrological doctrine.

If one weighs these things with the judgement of proper examination, one will see true religious devotion is offended by no greater error. It is equally impious to believe that there is no religion at all, or that it comes from some fateful necessity of the heavens.

If an astrologer were to adopt some religion, he would be inclined to idolatry, so that he might worship and revere those gods from whom good and evil things flow. Whence do the heresies of the Manichaeans, who remove free will, come, other than false belief in fate? All superstitions originate from astronomy, and Varro confirms they are nurtured by it. All writers call geomancy the daughter of astrology. The magicians consider the art so essential they call astrology the key to magic. The chiromancers form seven mounts on the palm of the hand, corresponding to the number of planets, whence, based on the lines seen there, they may foresee the future.

But we shall address these absurdities in detail when, after overthrowing the mistress and queen, we shall trample the rest of the crowd. It is evident that all other superstitions rely on astrology and cannot stand without it. There is no superstition which does not make use of the selection of days and hours, for which only astronomy provides instruction.

After the manner of Ecclesiastes, it can be said: Vanity of vanities, astrology, and all superstition is vanity.

Of morals there is no need to say more. Vice could have no greater defence than if the heavens themselves were considered its author. Nothing would make one less inclined to fear hell, or to hope for happiness. If these things are true – even if this profession is true – their truth would be most usefully left unknown. But since these things are false, their falsehood would be most usefully contested.

This task, indeed, I wish to carry out at every opportunity. I have embraced the matter with the desire to aid religion and to uphold the truth.

Chapter Six

This art is fallacious, if it exists at all, because of many factors and because of the conflicting opinions of astrologers.

Thus far, we have shown that astrology can be effectively refuted and that its patronage is unworthy of both a philosopher and a Christian. Now, before we engage the astrologers in debate and thereby demolish them, let us see how much facts and events themselves prove astrology's falsehood. What proportion of events happen as predicted by astrologers? Or, if something does happen, why does it happen?

I am all the more amazed at those who, in arguing against this art, always raise the objection: if astrology is false, why are astrologers' predictions nevertheless true? The astrologer delights if, when we raise objections to the falsity of their predictions, they can respond in some way. We shall not let them form an argument against us in this manner.

We previously cited the words of Ptolemy, who was attempting to resolve this question. He attributes the deceitfulness of astrologers not only to individual practitioners, specifically those lacking skill or diligence, but also to the art itself, which is uncertain and prone to great error.

Porphyry says oracular responses are false. Those deities predicted things based on the heavenly causes they had examined – yet their predictions were misleading. And if the demons themselves, whom nothing escapes in heavenly matters, were deceived in their perception of the future… I ask, what shall we judge of men?

Among those who are, and have been, the most excellent astrologers – if it even exists as a valid art – not even a thousandth part of the truth has ever been attained. Of all the arts that characteristically stray into error, none has more uncertain judgement, and I believe even the astrologers themselves would not deny this.

They say that Human Will often makes things turn out differently. The flux and mobility of matter often frustrates the effects of celestial actions, and one fate is altered or hindered by another. But if you carefully examine human affairs, you will find almost no situation where something does not alter even a true prediction from the heavens.

For it is man's characteristic to order his affairs by free will and reason. That which is bound and connected to matter is strongly subject to change. Moreover, when nothing itself is in a bad state, almost all people depend upon each other, and there is no one whom another's fortune cannot either harm or help.

A fortunate son may have an unfortunate outcome by the misfortune of his father, and an unfortunate will receive a good outcome from the good fate of his parent. A servant rendered slightly unfortunate by his own birth will act successfully for a fortunate master. The fate of a soldier depends upon the fate of the general, the fortune of the patient on the physician, and conversely, that of the physician on the patient, in various ways.

From all of this, we see that what the astrologer predicts for each person does not necessarily happen, even if this profession is true. Much less that the truth of astrology might be proven by the truth of the practitioners' predictions.

In fact, there is such great disagreement among astrological authors that all of them, or at least the majority, must necessarily be speaking falsehoods about the future. They admire and venerate certain Egyptians, Persians, Indians, and Babylonians as if they were the priests of celestial mysteries. With inflated cheeks, they daily sound forth the names of these authorities into the ears of the unlearned, as if the names themselves were divine.

But you, O astrologers, cannot speak the truth about what is truly true. You only have the books of the more recent authors you imitate, diverging in every way from the ancient discipline. For Ptolemy, your founding father, heavily criticises Egyptian astrology. Sometimes he calls it scarcely reasonable, and sometimes he attacks it with other reproaches, as is clear to anyone who reads the *Apotelesmata*.

Nor does Ptolemy alone disagree with his predecessors. They themselves disagree with each other: the Indians, for instance, with the Chaldeans, and the Egyptians with the Chaldeans. The Indians differ among themselves, and the Persians disagree with all of them.

Nor is Greek astrology any more in agreement with itself than barbarian astrology. What Ptolemy rejects, Dorotheus embraces. Paul holds one view, Hephaestion another, and others think and hold still-different views. Nor will you find any who does not support his beliefs with the authority of observed events.

The Arabs quarrel both among themselves and with the Greeks. Just as Ptolemy rejects ancient astrology, so Albumasar rejects Ptolemy's astrology, to the extent he claims nothing can be found in those books that agrees with either reason or experience. On the contrary, Averroes says that no one has spoken reason in astrology except Ptolemy, and that if you examine the others, you will find them far removed from the truth, but the statements of Ptolemy can in no way be found false.

The foremost of the Hebrews, Abraham Ibn Ezra, disagrees with Ptolemy and often criticises Albumasar. Indeed, he rejects and repudiate Albumasar's entire book, titled *De Magnis Coniunctionibus* in Latin (*On the Great Conjunctions*).

Therefore, if the followers of Ptolemy speak true, do not the ancient Arabs necessarily lie? If those books, which astrologers boast about, were admired by everyone because they revealed the truth, Ptolemy and Albumasar must have been ridiculed in each of their

respective eras. Others, who entirely deviated from their doctrines, must have suffered similar ridicule.

You will find this the case, among every people in every era. There have always been men who claim astrologers predict truths. But correct prediction happens not through the truth of doctrines, but by chance, and there have always been those who hold astrological deception in mockery and contempt or even hatred.

Whatever may have been the case in the previous age, in our own time it is impossible to confirm the truth of astrological doctrine from its teachers. They follow corrupt authorities and do not understand the good ones. They perform their duty carelessly, and ignore things that should be considered, invariably sparing themselves toil and labour, while rushing towards mere financial gain.

Were I intending to teach astrology rather than refute it, I would extend a hand to the errors of the younger people professing this art. But this is not my purpose. Yet it might be worthwhile to note further things, so it becomes even clearer that astrologers cannot predict the truth, even if their doctrines be most true.

Chapter Seven

On the ignorance of the astrologers of our age.

Astrological predictions concerning humans are either universal – from the chart of the year, from an eclipse of the Sun and Moon, or from the conjunctions of the higher stars, it predicts future good or evil in general – or they are particular, such as when something is divined about an individual's private fate from their nativity.

In the first category, nothing is more powerful a cause than the eclipse of the lights (Solar and Lunar), from which the greatest and most universal changes occur. In the second,

nothing has greater weight than the calculation made about the span of life and the number of years.

In both, it is astonishing how modern and barbarian writers err, including those whose authority is highly regarded among our astrologers.

Ptolemy writes in the second book of the *Apotelesmata* that during the eclipse of the Sun, two things are chiefly to be observed: namely, the location where the Sun is eclipsed and the angle which closely follows. For example, if the eclipse occurs in the ninth house of the sky, the angle of the tenth should be observed; if in the eleventh or twelfth, the angle of the Ascendant.

In the Greek text it is 'of the following angle.' But in the common translation it is rendered 'of the preceding angle,' from which the entirely opposite meaning is derived.

This error was passed onto the barbarians by John Astendensis. In that work commonly called the *Summa Angelica*, to which our people give chief authority, John wrestled with a long and complex question. He finally decided Ptolemy's view was that the observed angle was not the one which follows, but the one which precedes the place where the eclipse occurred. This is entirely contrary to Ptolemy's opinion, as is clear from what we have said, since it is written in Greek as *ἐχομένου*, that is, 'of the following,' and not *προηγουμένου*, that is, 'of the preceding.'

A little later Ptolemy himself, explaining these angles, names the meridian of the Sun and the eastern angle. The Greek interpreter warns us that the western angle is omitted. The western angle cannot follow the eclipse location unless the Sun is obscured below the earth. When this happens, astrologers do not consider it to have the power to affect future events.

But if the observed angle were the preceding one, then the eastern angle ought to have been omitted by Ptolemy. The eastern angle cannot not precede the eclipsed Sun unless it is below the earth, and the western angle should instead have been counted. Whether the eclipse

occurred in the eighth or ninth house of the heavens, the western angle would always have been found to precede the eclipse.

From this error, the entire method of astrological prediction is altered, since astrologers consider nothing more than the nature and state of the stars, along with the location of the lights, and the angle dominating them. When it is one angle or another, this will bring different ruling influences. And according to the differing nature of the ruling star, predictions of future events will always vary, indeed even in a contradictory manner.

I shall briefly discuss the estimation of human lifespan, which these little diviners understand not at all.

Haly Abenragel is the oracle of the astrologers of this age. In the fourth part of his work, he follows the opinion of Ptolemy, stating that there are five *hylegs*. The Sun, the Moon, the Ascendant, the Part of Fortune, and the place of the last full or new moon. Besides these five, the planets are to be considered. They hold authority and influence in those five places.

The next chapter speaks of the *alchocoden*, the giver of years. As described by this chapter, Ptolemy says the *alchocoden* is the planet which has most authority in the *hyleg*, whether it aspects it or not. Subsequently, Haly Abenragel often repeats many things about this *alchocoden* according to the opinion of Ptolemy. Our astrologers, who follow Abenragel and other barbarians, fall into the same error, investigating the *hyleg* and the *alchocoden* in every nativity. But for Ptolemy himself, this *alchocoden* counts for nothing, just as the goat-stag or the chimera count for nothing.

Read all Ptolemy's books, read all his interpreters, read even the barbarous translations, and you will not find any expression corresponding to it from him. This opinion about nativities, which makes one thing the *hyleg* and another the *alchocoden*, giver of life

and years, belongs to later times. Neither Ptolemy nor his predecessors ever held any such opinion.

Ptolemy himself first lists the locations he calls *aphetic*, which the Arabs call *hylegialia*, and in Latin, we may call *dimissoria*. These are so named because the course of life is released from there, as with starting gates. They are known above the earth, or are connected to the West or the Ascendant by some affinity.

Then Ptolemy establishes the *aphetae*, that is, the *dimissores* themselves, who from those places, as if from starting gates, bestow the impetus of life by their own influence. He wants these to be the Sun, the Moon, the Ascendant, the Part of Fortune, and the wandering stars that dominate in those places.

Among these all the *hylegs* are counted. Beyond that, Ptolemy cites no other distributor of years, although the *aphetae*'*s* gift can be both increased or drained, through interaction with favourable or unfavourable stars. Both barbarians and our own people believe Ptolemy adds another factor, in addition to the *aphetae* or *hylegs*. This they call the *alchocoden*, which supposedly determines lifespan. But as I have said, Ptolemy himself says nothing about this, though the astrologers themselves, from the great man's authority, seek, debate, and define many things about it.

Not only are they sorely mistaken with regard to the essence of the matter, but also in the very enumeration of the *hylegia*. Haly Avenrodan claims Ptolemy numbered the position of the preceding new or full moon among these *hylegia*. However, regardless of whether the nativity was nocturnal or diurnal, Ptolemy never does this. This same Haly accuses Ptolemy of contradicting himself, and indeed boasts greatly about this criticism of Ptolemy. Haly says no one before has ever dared oppose Ptolemy, and he accordingly gives great thanks to God, the revealer of secrets.

He claims that Ptolemy contradicts himself, because he does not count the eighth place among the *hylegia*, for the *hyleg* does not aspect the Ascendant. *Quid despis, barbare*? What are you scorning, barbarian? Or what are you dreaming? Where have you read of the *alchocoden* in Ptolemy? But I know what has deceived Haly and the others.

Ptolemy places the planets among the *hylegia*, ruling in the remaining *hylegial* places. His critics think the planets are different from the *hylegia*, so the remaining four – Sun, Moon, Ascendant, and the Part of Fortune, to which they falsely add the new moon and full moon – hold the consideration of the *hyleg*. Thus the planets ruling in those places would determine the years.

Since Ptolemy nowhere says it is necessary for the ruling planets to aspect the *hylegia*, the critics wonder why he did not think those two things – the *hyleg* and the *alchocoden* – should be joined by the association of aspects. It is indeed no fault in Ptolemy if he did not seek an aspectual association among things that are one.

For in his works, whenever the Sun or Moon serve as *hylegia*, there will never be another planet besides them serving as the giver of life. Rather, he then uses the ruling planet, since the other *hylegia* do not possess authority in the allotment of years. When this is the case, there can be no association left between the vital planet and any of the *hylegia*, as, clearly, there is no other planet to be found.

I do not know how these individuals failed to understand this from Ptolemy's words, nor how any of them failed to realise it. All went astray in this error together, so there is now no one who does not seek the *alchocoden* and *hyleg* 'according to Ptolemy's view.'

See how 'true' the doctrines of the astrologers really are. How can they predict the span of life, when these vast accumulations of errors are considered? These false predictions declare the number of years 'according to the opinion of Ptolemy,' and according to the common belief that the years of life are equal to the greater number of the Sun, the lesser of

the Moon, the middle of Mars, and similarly for other stars. Ptolemy himself rejects this Egyptian opinion, saying it has no reason behind it.

When Ptolemy speaks of the span of life, he does not count the years according to the nature of the planets. Rather, he calculates according to the number of parts of the equator circle, using the place of life, that is, the *dimissor*, and another lethal point, one that causes the destruction of those intercepted, against which the already-waning life-course runs, thereby gravely harming the individual subject. When the *apheta* is placed between the horizon and the heights of the sky, the movement called radiant projection should be observed. When, instead, it declines from the heights to the west, drawn in both directions, we have that calculation we call hourly.

Of these things our astrologers are so ignorant that if they read them, they would think they heard monsters. Yet, we, far too credulous in believing their predictions, forget the words of the Lord, who commands us to be ready, not knowing the day or the hour of our death. If the astrologers threaten us with a short life, we are tormented and anxious, day and night. The voice of a single quack destroys all the joy in our life.

Haly Avenrodan says if the planet of fortune is in the Ascendant, 'according to Ptolemy's opinion,' it will add its own lesser years to the years of life. And yet, as I have said, according to Ptolemy, there are no planetary years, whether greater, middle, or lesser. When speaking of the addition of years, Ptolemy follows a completely different method, using the division of hours, which I believe Haly does not understand. But it is unnecessary to pursue each individual point. Otherwise this book would grow endlessly.

With regard to the questions astrologers call 'interrogations,' they err so significantly that the entire method of answering is perverted by a single mistake. It is a commonly accepted idea among them that the seventh thematic place, that is, the West, should be assigned to the matter being interrogated. And yet, Ptolemy, in his work, commands that this

place be assigned not to the matter being asked about, but to the mathematician who is consulting.

This is also what the mathematicians of the Indians observed. So much so, that when the West and the ruler of the West were bad, the astrologers did not answer the question, fearing error. I could list six hundred such errors, but I would rather focus on the fact that the entire profession is shown to be false. Recently, when comparing Ptolemy's books with the works of barbarian and Latin authors, nearly all the words were confused.

Chapter Eight

On the carelessness of the astrologers of our time, which is so great that, even if astrology were true, they themselves could not be true.

The negligence is so great, you will find few astrologers, even among those who have a method for calculating – the majority of them lack it – who do not resort to the *ephemerides*, in order to understand the true positions of the stars. Bonatti attests in a certain place: "The wise men of this art use an almanac, for so the Arabs call the *ephemerides*."

But those who do this perform their work incorrectly and omit many necessary things, so that the resulting prediction will be weakened. There is almost never any indication of the latitude of the planets. If this is unknown, how will the astronomer not err, and so how will he not lie, if we think astrological predictions to be true?

The astrologers think the stars have the greatest power at the beginnings of the twelve houses of the sky, especially the cardinal points. But when the stars are in those places, they will not be thought there, and when they are not in those places, they will be thought there, at least by an astronomer who observes only straight progression, and has not foreseen the declination of the stars to the side.

When a star turns northwards or southwards, it always rises later, and more quickly, in the part of the sign where it is located. Thus, at times, you will think a planet is above the earth, when it is actually below the earth, and a planet will seem to be above the horizon, when it has already set.

While this causes error in predictions, it will especially lead astrologers astray when they investigate the natal hour from the time of conception. If the Moon happens to be near the west, it could be thought to have already set when it is still above the earth. On the other hand, the Moon might be imagined above the horizon when it is hiding below the east. This sends the calculations astray by many days, even from the hour of conception.

Who can correctly determine the radiations of the planets if their latitude is ignored? How can the progression of a certain star (for thus it is called in Greek), commonly known as 'direction,' be measured accurately, when deviation, in any direction, from the path of the Sun either accelerates or slows the outcome of given events by several years?

Hence, there is considerable error in placing the fixed stars. These are commonly placed as though they move in a straight line, without at all considering the part of the sky, in various regions, in which they rise and set, or even where they shine at the beginnings of the remaining 'houses'!

Moreover, *ephemerides* often show the positions of the planets with little accuracy, not only due to the mistakes of scribes but frequently because of the author, who may have been lacking sufficiently diligence or skill. Different astronomers also use different tables, which are sometimes not very precise. Even when someone composes their own *ephemeris*, it deviates from the truth, especially in our present age.

Everyone now rejects Ptolemy's tables, and the majority of the more learned follow those of Alfonso, although there is evident falsehood in his foundational calculations. Nor are

these astrologers any less careless or sleepy when selecting the Ascendant and establishing the starting points of the twelve celestial houses.

I have seen many, of no small expertise and with a good reputation in this field, who somehow use their own chart for distributing the twelve houses, as they call them, without regard to the latitude under which the person (whose nativity they are inspecting) was born. If these practitioners ever attempt to be diligent, noting the climatic differences that Alfonso shows them, they will scarcely search for anything more precise.

Who, in casting nativities, now pays attention to declinations from the equator, the circumferences of the planets, their various elevations in the smaller circle or the eccentric, or the variations of their latitudinal motions?

How much ignorance afflicts the younger generation, regarding the equalising of days, and how many things they state incorrectly! I have mentioned this to show that the art of astrological prediction cannot be reliable, since even if the reasoning were entirely sound, the faults of its practitioners – due to ignorance or negligence – mean the truth of future events cannot be known. If I cannot persuade people that astrology itself should not be trusted, let me at least persuade them, as said in the epigram, that foolish astrologers should not be believed.

Chapter Nine

What the astrologers say rarely happens; this is shown by both foreign and domestic examples.

If astrological predictions were generally true – not entirely, but generally – astrologers would not have been cast out of cities, nor held in derision by the wisest. Rather, they would be held in the highest honour among all peoples, for such is the curiosity of

humanity to know the future, especially about matters concerning themselves. There would be great admiration and esteem for those who could provide this knowledge. We often read of statues erected and public honours decreed for philosophers, physicians, poets, and emperors. How often do we read of such honours for astrologers?

We read instead of astrologers being cast out, ridiculed, or even turned into popular fables. The allegories in ancient stories, usually drawn from the common sense and experiences of life, contain critiques of this vanity. Those who interpret Homer allegorically say the story of Icarus – who, trusting in artificial wings, soared into the heavens only to fall into the sea – represents astrologers. Such interpretation argues that astrologers, raising themselves into the heavens on the wings of a reckless profession, attempt to make predictions about celestial matters through elevated doctrines, only to subsequently plunge into a sea of falsehoods.

Why do we need other testimonies when daily experience testifies for us? If astrology possessed any power, it could easily demonstrate its efficacy, through predicting changes in the weather. Rain, drought, heat, cold, winds, hail, and tremors of the earth. In such matters, astrologers are found to be so false that vanishingly few days' actual conditions ever align with their predictions.

This past winter, at my suburban villa – where I wrote these pages – I observed notable changes in the weather every single day, with the astrologers' very predictions set before my eyes. May I be cursed, if over the course of one hundred and thirty days of continuous observation, I saw more than six or seven days where the weather matched the predictions in the books!

I think my Pandolfo Collenuccio still remembers – though a jurist, he is most learned in all literature – how much laughter a certain astrologer once gave us in Bologna. He predicted that the Sun would render the day very bright, clear, and most serene.

In the *Hexaemeron*, St Ambrose says there had been talk of rain a few days earlier – which by chance was considered useful – and someone said: "Look! The new moon will bring it." But no rain poured from the skies until the prayers of the Church were sent. This shows rain should not be hoped for from the phases of the moon, but from the generosity and mercy of the Creator. These are Ambrose's words, whence both the vanity of astrology and the efficacy of religion are demonstrated.

Therefore, those less capable of reasoning, who have entrusted their faith to these astrologers, can free themselves in this fashion. Let them repeatedly ask about the conditions of the weather. They will almost always find the astrologers speaking falsely about it. Furthermore, one will easily notice that if these tricksters lie about even the clouds, they will predict still-greater falsehoods when it comes to the destinies of individuals and nations. For those predictions are made about matters less subject to the heavens and far more difficult and laborious to foresee.

If anyone examines astrologers' mercenary prophecies concerning human nativities, about which they babble daily, it becomes clear they lie even more here than about the weather. And if I detail others' foolishness too precisely, and so fear the charge of foolishness upon myself, I would bring forth many examples both living and dead, of the unfortunate among the fortunate, and of the most fortunate among the unfortunate. In this matter I do not lie, for Divine Truth, on whose side I endeavour to fight, neither needs nor delights in our lies.

I will content myself with certain examples from my own household, by which I especially wish to warn those who, having received a promise of long life from the astrologers, forget the voice of the Gospel. We are warned to be watchful, lest the day of the Lord come upon us when we are unprepared.

To Pino Ordelaffi, Prince of Forlì, to whom his sister Lucretia was married, Girolamo Manfredi, an astrologer unique in our time, promised perfect health.

For the year in which Ordelaffi died.

No wonder Manfredi failed to foresee the deaths of others. He could not even foresee his own. He passed away the previous summer, and in his public prediction that very year – a year which indeed proved fatal to him – he repeatedly foresaw he would say many wondrous things in the following year. I do not know how Manfredi will redeem the trust placed in him. Perhaps from heaven he now looks down on earthly matters more truthfully than he once speculated on heavenly matters from earth.

Pietro Attendalo, an ingenious young man, who had Eleonora as his wife, the daughter of Galeotto's brother, died the previous year. He was struck down by a sudden and unexpected illness, although no such thing had been predicted by the astrologer he most trusted, and who had promised him security of life. Constantia, the most loving wife of Antonio's brother, who passed away two years ago in Rome, and who died amid the public mourning of nearly the entire city, does she not testify to the vanity of this art?

In the year she left us, she received a promise from an astrologer that she would not only enjoy good health, but also the most fortunate life. Forgetting nothing, already breathing her last, she held the hand of the weeping man who dearly loved her, and said: "Behold, how true are the predictions of the astrologers!"

In contrast, for the brother, Antonio himself... Good God, what evils, what burdens of troubles supposedly faced him. Yet he experienced no injury from the heavens. He lived, his family safe, his property intact, in perfect health, unshaken by any misfortune or danger.

Lest you think only our astrologers lie, know the same also happened to the ancients. Seneca, in a certain passage where he fiercely criticises the most wicked Claudius Caesar, includes a scene where Mercury procures the Emperor's death. To casually lampoon

astrological vanity, among the reasons for Mercury inducing Claudius' death: "Mercy for the Chaldeans," he says. "They have proclaimed his death for many years."

The astrologers were predicting every year that Claudius would die, yet he was not dying. When I read this, it reminded me of our diviners who proclaim the Roman Pontiff every year. Cicero also writes that the Chaldeans predicted to Pompey, Crassus, and Caesar that all of them would die from old age, at home, with distinction. It is surprising, says Cicero, the wisest of orators, that anyone believes these predictions, when they are daily refuted by facts and events.

Chapter Ten

Why astrologers sometimes predict the truth.

The things astrologers predict sometimes do happen. However, since there are many more false predictions than true ones, why should we not consider that they have stumbled upon the truth by chance? There is no art so foolish, so full of vain superstition, which is not proven true by the same argument, just because sometimes, indeed, its predictions prove correct. There is no art that does not achieve this, even one you yourself have devised as being rash and arbitrary.

Therefore, let them tell me, those who are moved by this reasoning: do they think every divinatory art is true, or that many are vain and false? If they think many are false, I will prove those arts to be true by the same argument. Sometimes, after all, they predict correctly. If these people think all divinatory arts are true, I will show they believe contradictory things. Different divinatory arts do not give identical responses about the same matter.

I myself have a hundred times experienced this. When I have examined a question by drawing up both a geomantic figure and an astrological chart, one outcome appears in the figures, and another in the stars. If someone disbelieves this, let them try it themselves. Let them consult a chiromancer, an astrologer, and a geomancer regarding the fate of the same person. Almost always, the lines on the hands do not indicate the same thing as either the geomantic figures or the astrological planets. If one considers the outcome, he will find truth more often where he least expects it. Either because chance has greater power where there is less reason, or because spiritual deception is more willing to play tricks on us in such cases.

But a great deception assists the predictions of astrologers, for it is often not so much that their forecasts are accurate, but that many people see them as accurate. If they must speak about past events to show that the heavens have foretold correctly, astrologers can easily ensnare the minds of the unlearned. There is no position of the stars, no birth chart, in which one does not find a constellation indicating both favourable and unfavourable outcomes in multiple ways.

Especially since the astrologers have invented for themselves more things in the heavens than the stars God created. They will always derive something from past events to defend their position. Rarely do they find in the planets what they want, yet by many methods they render people both fortunate and unfortunate, having more authority, it seems, in heavenly matters than in earthly ones.

Thus, the position of the heavens will always support the astrologer. The goodness or malice of a sign, or the influence of another star, or love with the Sun, or hatred or friendship with the Ascendant, will lend support. If these do not satisfy their need, astrologers will call for help from the fixed stars, about which they themselves are never free from error. If even these do not satisfy, astrologers will have ready the Images of the Indians, the Parts of the Egyptians, the Antiscia of Julius Firmicus Maternus, the Dodecatemoria of the Chaldeans, or

something completely fictitious. The falser and more fabricated, the greater the pride they take, as if this were an occult doctrine.

When predicting the future, they have less opportunity to deceive, although even here they are not entirely lacking in methods. For they often infer by observing the earth, as the saying goes, rather than the heavens, recalling that line of Euripides: "He who conjectures well, let him be the best prophet." They generally pronounce things that almost certainly cannot fail to happen, or at least cannot be believed not to happen. And they ambiguously deliver in the manner of oracles, always adding some qualification so that what was predicted can either be diminished, increased, or obstructed. If the prediction happens, you cannot say it was not predicted, and if it does not happen, the astrologer is nevertheless thought truthful.

You will rarely hear anything definite, specific, and clear from them. When the astrologer dares offer something of this kind, they either, very rarely, prove correct by chance, or, far more frequently, are refuted by experience. But what was said about the Temple of Apollo happens to them: correct predictions are remembered and celebrated, while no one recalls the errors. Those who favour them do not wish to know the mistakes, and those who scorn them know neither the mistakes nor the successes.

Nor can we overlook what St Augustine says: that through a hidden influence of demons – which they suffer unknowingly – people sometimes reach truths they would otherwise not attain. We see certain individuals, through miraculous prediction, pronounce an event or action that the stars cannot foretell, not even in the view of astrology presented by Ptolemy himself. But how can such people suffer unknowingly? How could we consider their predictions guided by demonic influence? This can happen in many ways.

It is acknowledged among practitioners that one astrologer may be more fortunate than another in reaching the truth, even if both possess equal talent, knowledge, and

diligence. But let them say what it means for someone to be 'fortunate' if they do not seek truth by any means other than the principles of the art itself.

If one practitioner follows the principles of astrology equally as well, or even better, than another, yet is not equally fortunate in predicting the truth, then 'fortune' must mean something else. Varied constellations arise for the same question, and conflicting or differing opinions exist among authors regarding the same constellation. One's mind might be divinely inclined towards the true interpretation, so truth is found by chance unintentionally. Similarly, a demon acting without one's awareness might exert a hidden influence, thereby leading someone to the truth without the person ever perceiving that they are being led. How this happens shall not at present be more fully explained.

Also, having falsely predicted something earlier, one may bring about its fulfilment through subsequent action, thereby making the prediction 'true.' Divine justice demands no penalty more fitting than this: that minds which do not submit to Divine Truth bind their faith and freedom to the deceptions of a rogue and impostor.

But enough about why these triflers sometimes babble and scatter some truths. As we said at the beginning, it should not cause much concern. The things they rashly or cunningly predict as true, when compared to that which they lie about… as Favorinus testifies, that portion of truth – a mere thousandth – is never found.

Here ends the second book of Giovanni Pico della Mirandola's Disputations Against Divinatory Astrology.

Disputations Against Divinatory Astrology

By Giovanni Pico della Mirandola, Count of Concordia

Book Three

Chapter One

What was said in the preceding book. What is to be said next, and in what order.

We have resolved the people's question regarding astrologers. Whence comes faith in astrological responses, if there is no solid foundation for their profession? I have called this the people's question, of course, because the more intelligent and learned do not employ them. The wise know what astrologers say rarely happens or, if it does, it happens by mere chance. If correct predictions do occur, it does not follow that the art of astrology is necessarily true.

But nor is it necessarily false, merely because astrologers very often lie in their predictions. One can pronounce falsehoods derived from true and sound principles. Errors are not necessarily due to any inherent falsity on the part of the art, but rather because of the field's conjectural and opinion-based uncertainty, to say nothing of the ignorance or carelessness of individual practitioners.

That said, true predictions are not rendered true by the truth of the doctrine, but by the cunning of the pronouncer. Or by luck, or by chance, or by the hidden promotion of foreknowing divinities. We sufficiently explained this in the previous book. But if this does not persuade, let the reader recall what we discussed earlier, about the negligence and errors of the astrologers of our age. Hopefully the reader recalls without hatred or envy. Unless he

wishes to be deceived, whenever astrologers achieve the truth, he cannot be led to think it is a matter of discovery, rather than of merely stumbling across it.

The following treatise will settle this dispute. It will be demonstrated that the things astrologers derive from the heavens lack causes or signs by which they may be brought about or indicated. Or if they do happen, they happen otherwise than the way astrologers suppose. Or if they happen even in that manner, it is not from causes in the heavens or from astrological principles on earth. If all this is granted, it will be seen that neither these principles nor these causes can be apprehended by men. If they possibly *can* be apprehended, they have not yet *been* apprehended.

I say, when this matter has been demonstrated, it will be beyond controversy. If an astrologer happens upon the truth, it cannot be attributed to the truth of the profession. The fallacy is clear and evident, for the astrologers' position is supported by no true reasoning. Rather, the nature of it is entirely fabricated and deceptive, and therefore clearly false.

Therefore, let us now commence the refutation. We shall first examine the essence of the matter: whether the heavens produce the effects these diviners claim. In this book, we will argue that the heavens act upon us only through motion and light. It is vain to imagine any more hidden and subtle influences beyond this. Furthermore, from that light and motion of the stars, nothing else is communicated to receptive matter except motion, light, and heat. Specifically, heat that perfects bodies in a general flow and directs bodies capable of life towards life and the functions of life. This flows from the stars, although it is not admitted by all that even the effluences of the planets reach us.

That the stars bestow anything else on lower things is it neither proved by reason nor demonstrated by experiments, nor follows from the authority of the leading figures of philosophy. Rather, all these things argue against the power of the heavens affecting sublunary bodies in any way beyond these common influences.

The peculiar properties of things, even bodily ones, whether they derive from form or particular, do not originate from the stars, save by reason of a universal principle. Rather, they derive from the proper nature of the things themselves, and from their proximate and related causes. We shall render this opinion of ours most plausible, both by our own arguments and by destroying those which astrologers use against us.

We shall examine the individual prophecies about the stars, leaving this as our most manifest point: that those things uncaused by the heavens are not signified by the heavens. Those things bereft of celestial cause have no sign, and there is thus no method of foreseeing them from the heavens. Now, in fulfilling what we first proposed, let us see with what they attack us, those who claim that all things are bound to the stars, guided and governed by them. With divine aid, we shall soon repel our adversaries, and drive them away with the greater force.

Chapter Two

Five reasons for supporting the power of astrology.

Astrologers opine that any changes in the sublunary world, as well as all diversities of things, random events, and the morals and characters of men, depend on the stars. Among their arguments this is the most important one: the unanimous voice of theologians and philosophers holds that the lower world is governed by God through the heavens. Aristotle states, most commonly, that this lower world is necessarily connected to higher movements. Therefore, its power is governed from there. St Augustine also says that coarse things are ruled and moved through more subtle bodies.

Who, then, would doubt that changes in earthly things are caused by the movements of the higher bodies? Experience itself demonstrates this. The changing seasons of the year,

through the Sun's approach and withdrawal, vary the habits and conditions of all living beings. The sky influences the fields, and the crops, and both gives and takes away. The Sun's daily revolution alters the qualities of the air, more or less, at midday, in the morning, and in the evening, heating, drying, and leaving behind moisture or cold. The Moon commands great powers over all bodies, especially the more fluid ones.

The Moon produces the tides of the ocean, their rise and their fall. It sends seawater onto land and carries it away. Creatures submerged in the seas, enclosed in shells and confinements, alter their bodies according to the movements of the Moon. Critical days, observed by doctors, follow the movements of the Moon and the Sun.

The Moon – full, waning, or half – very often stirs up storms and agitates the bodily humours. Hence many observations about the Moon have been received by shepherds, sailors, and farmers, confirmed through extensive experience over past centuries. If we perceive the impressions and authority of the luminaries in altering lower things, should we believe the other stars ineffective? Or might their powers, although more hidden, still reach us, thereby affecting those bodies subject to them?

Those both knowledgeable and prudent may predict certain hidden things about future events more accurately than physicians, shepherds, farmers, or sailors. No one would deny the air and storms are influenced by the stars, since heat, cold, dryness, moisture, and all such weathers are generated by celestial influences. If dry exhalations enclosed within the bowels of the earth move the earth, if changes in the air arise from the excess or deficiency of the four qualities, if the scarcity of crops is caused by either excessive moisture or dryness – indeed, influencing when fruits are either harvested or sown – and if, in turn, a moderate and suitable condition of the air produces fertility, who will deny that not only weather and earthquakes, but also plagues and diseases in humans and cattle, the healthiness of regions, and fertility and barrenness arise from the stars?

If we too consist of the same qualities, and the physical condition of the body, as well as one's character and dispositions, alter with time – subject to individual freedom – inclinations in us towards anger, gentleness, or other emotions, both good and bad, may be caused by the stars. That is, the stars either stimulate or restrain bile, blood, phlegm, and black bile – the humours that accompany those emotions. Can the dry and hot impressions of the heavens, sharpening the bile within us, not excite disputes, quarrels, insults, and enmities? Whence come wars, massacres, and devastations? Whence are empires and kingdoms overturned?

After this, Ptolemy concludes: if the stars cause diversity of body and soul, this diversity is transferred to related external things, such as a wife and wealth for the body, and dignity and honours for the soul.

This is the principal reasoning of Ptolemy. He does not prove the causal power of the stars in ways other than through the efficacy of the primary qualities. By producing these qualities, the stars produce other things in consequence. Therefore, Ptolemy does not cite other causes, why Saturn does this, Jupiter that, and Mars another thing, except through the fact that Jupiter is a planet hot and moist, Saturn dry and cold, and Mars dry and hot.

This is Ptolemy's view concerning the wandering stars, and likewise concerning the fixed stars. He judges the fixed ones from the nature of the wandering ones and the wanderers from the nature of the primary qualities.

However, other astrologers might abandon the primary qualities, resorting to hidden powers and more eminent forces. In their view, such powers and forces are both highly effective and highly numerous among the celestial bodies. Whenever we observe any singular and excellent qualities in earthly things, we consider them gifts of the heavens. Such qualities do not arise from the elements which comprise those things, but rather derive from a power infused from the heavens. Surely those most noble and celestial bodies, with such bright

light, such immense size, and such rapid motion, do not lack such powers and properties? If they transmit both motion and light to the earth, will they not also be the producers of wonders among us?

Finally, the great and varied course of human affairs – on which the divination of astrologers chiefly depends – seems to compel belief in the power of the heavens, even among the unwilling. We see so many things happen beyond the strength of mortals, many things contrary to reason and merit, and very many things contrary to the order of the human condition. All seem to have no other causes than the heavens, or fate.

This man is born inclined to philosophy, that one to poetry; another, having rejected learning, handles either civil business or arms more willingly and more successfully. Whence comes this variety of talents?

There is one who regards wealth as nothing; another who sells his soul for profit; this man is sober, that one debauched; this man bold, that one fearful. Whence such diversity in character?

Alexander conquered the East as quickly as he saw it; whence the impetus of such great fortune? What power revealed the secrets of nature to Aristotle, his teacher, or to Plato, or earlier to Pythagoras, Socrates, and the others?

The reason is believed too great to have sprung from the earth. Who does not attribute such things to the random courses of the stars: an innocent man condemned; a guilty man rewarded; the diligence, skill, talent, and learning of many leading to beggary; while the laziness and wickedness of others brings wealth? A pirate, bloodied by slaughter, survives a thousand dangers of sea and land, only to die peacefully at home among his own and in old age; a man of the greatest gentleness and peace is accidentally slain by swords, even by those unwilling?

Certain prodigies and monstrosities of character, delighting in the foulest things or, to put it briefly, deviating from the laws of humanity… do they not seem to testify to some fated power? These things, of which mortal life is full, persuade many that unmerited vicissitudes of good and evil, and so great a variety of events, are caused by the motions of the stars. Fragile and perishable mortality can scarcely, or never, resist such celestial impulses.

Chapter Three

The first argument will be refuted. It will be shown that the heavens are a universal cause and should not be referred to as the cause of the diversity of individuals.

We have not undermined these arguments of the astrologers, but even strengthened them, lest the astrologers complain of an unfair hearing. However, the first thing we wish the reader to understand is that even if these arguments were conceded, it would not follow that any form of astrology could exist, as will become evident in the following books. But rather than conceding these points, we shall instead draw strong contrary arguments from the same premises.

Concerning their primary reasoning: when the astrologers say all lower motion depends on the motion of the heavens, they immediately contradict their own doctrine. It follows from that common principle among philosophers that the heavens are the universal cause of lower effects.

A universal cause does not distinguish among effects. Nor is it asked why this thing happens or that. This is instead asked of proximate causes, which are varied and differentiated according to the difference and variety of effects. One proximate cause produces one effect and another a different effect, but the universal cause produces all effects together. This is evident in things that are diverse in nature and kind. It is astonishing that the

astrologers fail to understand their principle must be applied to the variety of individuals. Being all the more particular, and deriving most of their origin from matter, individuals can be even less referred to a cause that is primarily formal and universal. Who does not see that the heavens, together with a horse, generates a horse, and together with a lion, generates a lion? There is no position of the stars under which a lion is not born from a lion or a horse from a horse.

By the same reasoning, why does the same sky produce different sons with different parents, even under the same or a similar constellation? This is confirmed by experience. Sometimes we see children born at the same hour and under the same inclination of the sky, yet their fortune, character, and bodies are very different.

Here the astrologer cannot turn aside the thrust. They are accustomed, when the birth of twins is cited, to resort to the Wheel of Fate, in which it is not possible to ink the same place twice. But here they explain themselves poorly, since they cannot grasp the difference from which there arises such great difference in fate.

While attempting to defend the influence of the heavens, astrologers fall into other traps. In defending this influence, they are forced to admit, albeit reluctantly, that they cannot have knowledge of it. Then we do not present them with twins, where one exits the womb after the other, a delay that provides astrologers with an excuse. Rather we cite the case of those born simultaneously, at the same moment, from different parents, yet within the same region, latitude, and longitude. Two people whose birth the astrologer ought to describe with the same celestial theme, and for whom astrologers ought to make the same predictions, both for after their birth and for within their mother's womb. As they were born at the same hour, these people should be considered as having been conceived at the same time.

What will the astrologer answer, when the same constellation is present, but yet the fate of each individual appears different? Unless he goes mad, can the astrologer, say

anything other than that the celestial influences, universal in virtue and power, are determined and distinguished by the proximate and secondary causes?

But if this is the case, how can astrologers explain the variety of individuals, based on the hour of the birth under the stars? When here one is snowy, there one is black, here one has a short body, there one is tall, here one has a slow mind, there one a quick mind, here one is beloved by all, there one is a nuisance, here one is inclined to philosophy, there one is destined for commerce, here one is rich, there one poor, here one has a short life, there one a long span?

Within the same species, the variety of individuals is far less related to the heavens than to the diversity of species under the same genus, such as the lion, the human, the donkey, the elephant. Just as all these follow the specific difference of the proximate causes, so the individual follows the difference of the seed, if we consider physical qualities. Or they follow the mind, education, and will, if we consider mental faculties. Or they follow their parents, their own choices, prudence, and opportunities, if we consider external and fortuitous factors.

Chapter Four

In what way the heavens act through motion and light, and how they are the universal cause of meteorological, mineral, and living elements.

As the universal cause is more divine and eminent than particular causes, we attribute greater honour to the heavens than the astrologers. As this universal efficiency becomes clearer, so too will the effect of the heavens be more clearly explained.

It is necessary to begin at a higher point, speaking of the nature of the heavens and their actions on inferior bodies. The heavens are a natural body, indeed the most perfect of all natural bodies. A natural body has both motion and sensible quality. Therefore, the most

perfect motion of natural bodies coincides with the most perfect of sensible qualities. No motion is more perfect than the circular, nor is any perceptible quality more perfect than light.

Therefore, these will be the properties of the celestial body. The heavens, being of imperishable substance, have no opposition in their motion or quality, and because the heavens are the most perfect body, they must also be in the first place, namely the highest, to which the first motion must also be attributed.

What is first in each kind is the cause of the others contained within that series, although not all of them share the same reason for causality. Therefore, what is moved by the first motion moves the others. If that motion ceases, the others will cease to move. This is the same in the lower world; if the motion of the heart ceases, all the motions of the animal must perish. Hence, Aristotle correctly says in the eighth book of *Physics* that the motion of the first heaven is the life of all, since the most evident and common operation of life is its deepest motion.

Indeed, the efficiency of this universal cause is quite evident. Just as it operates on the falling earth, so too does it cooperate with flames moving upwards and other types of motion. The other of its prerogatives is light. Light is the highest quality of bodies, and the first degree of life for corporeal nature (the highest points of the lowest order almost always attain the extremes of the superior order). It necessarily follows that light should have a certain consuming power over bodies, and possess something of vitality. Not that it itself lives or gives life, but rather it prepares and arranges the body to be capable of life. This is because heat follows light, as if it were a property of it – a heat that is not fiery, not airy, but celestial, just as light is the proper quality of the heavens. This heat is an extremely powerful and salutary force, penetrating everything, warming everything, moderating everything.

This is the principal function of the sky. Through this bodies are perfected and living things are arranged for life, in addition to the agitation of circular motion. Necessary light

and heat are brought to us, and by turns, with marvellous timing, more or less distributed across the earth. Moved bodies are also made more capable by heat, which continuously emanates from the perpetually moving heavens.

We perceive the power of this most beneficent heat across the whole perishable world, in the incomplete and the perfected, in the inanimate and the animate. It holds and preserves the elements, their place and form, as if it were an artisan encompassing all things. But through all things, it also spreads itself intimately. And just as the effect of the first motion is that other motions stop without it, so with the first sensible quality. The other qualities cannot act without it.

If deprived of heavenly heat, cold shall be unable to produce coldness, and heat unable to produce warmth; for stellar heat is not contrary to cold, as fiery or aerial heat is. Rather, it contains all elemental qualities in simple eminence. Just as the nature of the heavens contains every body. Just as circular motion contains all motions. Just as light contains all colours, and – as the Pythagoreans might say – just as unity contains all numbers.

Those who insist cold elements cannot be preserved amid the heavens are wrong, unless, apart from heat, the stars also emit coldness. Such people might have a point, if the heavens preserved warm things with heat of the same nature and principle. But instead, the heavens preserve all things equally – hot, cold, wet, and dry – with that additional quality of its own, which, just as it is none of those four qualities, so it encloses all of them within itself. Here the qualities are not as they are in the elements, but are as something manifold, enclosed in unity by celestial power. Through this power, heavenly heat governs the four qualities. It unites each within itself by preserving these qualities, and preserves the whole within them. Governing all, by mixing them, it brings forth other things.

Indeed, the name of heat deceives, because when we hear it, we immediately understand it as something opposed to coldness. Elemental heat is indeed closer to heavenly

heat than elemental coldness, just as it is also more perfect; but this does not prevent heavenly heat, elevated above the properties of both elements, from encompassing both. Just as when we say radiance, we are speaking of something opposed to dark and black colour, but black colour, no less than white, is preserved by the radiance of light and thereby made effective. Although another colour, closer to the nature of light, almost shares the same name, so it is sometimes called *candidus*.

Furthermore, if the substance of the sky, as the first body, contains all bodies with perfection and virtue, it must necessarily have its own quality which contains all corporeal qualities with perfection and virtue. This is what we call the celestial or heavenly heat, the heat of light, that which vitalises and heats. Among all the properties of the elements, heat is the closest to it; when it degenerates from its celestial condition, it will chiefly exercise this operation, as we shall later explain.

Therefore, if this heavenly heat contains, with perfection and virtue, all the qualities of lower bodies, it will also generate and nourish them along with the proximate causes of those qualities. This is just as the seminal heat, although it is called heat, nevertheless governs, digests, preserves, forms, and moderates all the material of the foetus, whether it is hot or cold.

If anyone asks me whether the sky generates coldness by itself or by accident, I would answer: since you ask what the sky does by itself without a mediating cause, it only makes heat by itself. The other qualities are due to accident, just as heat itself makes cold by accident, as we shall explain in the following chapter. But if, as the universal cause, it operates with secondary causes, it will act by itself to produce both coldness and heat, both dryness and humidity. It no less generates water with water than it generates fire with fire. Water could not generate water without the universal cause any more than fire could generate

fire. And when it generates the substances of the elements, it also generates the corresponding properties, which is why it makes cold with water and heat with fire.

If we were to deny that anything other than heat is made by the sky by itself, those absurdities identified by St Thomas Aquinas follow. Namely that coldness, dryness, and humidity are not in the universals by themselves, but by accident. Or that all the substantial forms of inferior bodies are not contained in the virtue of celestial bodies. These absurdities do not follow if the sky, by itself and from itself, does not make the air or inferior bodies cold. Therefore, we approve of those arguments of St Thomas. We do not deny them, but rather assert them.

We have seen in the elements what the sky does, and we have confirmed the universal first causality. Let us consider other things made from the elements. That same heavenly heat, the son of light, raises vaporous exhalations from the earthly bodies, thereby thinning the dense and foul, and dissolving them. It further causes those things made in the high atmosphere, which differ according to the matter from which the exhalation comes.

If the vapour is lifted from the flowing body, it makes humid impressions in the middle or lower region of the air. If the fiery evaporation is lifted from the dry and earthly to the higher regions contiguous with the ether, it necessarily warms up from the motion and the proximity of fire.

Therefore, these things are also shaped by celestial heat. This is true whether they are cold or hot, since all things come from vapours, which heat alone excites. Therefore, heavenly heat works universally. The distinction and variety of things come not from the constellations, as astrologers argue, but from the matter and place in which they are generated. This is known from Aristotle's *Meteorology* and Plato's *Timaeus*.

Aristotle, intending to treat this as part of nature, presented the commonly held idea that the lower bodies are continuous with the higher ones. Therefore all the virtue of lower

bodies is governed from the higher ones. This could be understood in a more general sense due to celestial motion and heat, by which all things are moved and warmed, but Aristotle said this especially in regard to meteorological impressions, about which he was primarily concerned at the time. Intending to clarify his argument, he adds that all the lower bodies are matter, but the sky is the efficient cause.

I puzzle that certain interpreters of Aristotle feel the need to defend against the accusation that he claimed all virtue in the lower world is governed from heaven, as if these words might endanger our freedom. Such commentators do not see that, in the context of Aristotle's words, this only pertains to the elements. When Aristotle says 'world' there, he is calling the sublunary world the space filled by the elementary bodies. He is not referring to the bodies that inhabit this world.

This is clearly evident from the context of the words. Aristotle says his previous books have determined the existence of four bodies below the heavens: fire, air, water, and earth, and he then adds: "Since the whole world around the earth consists of these bodies, whose qualities we shall discuss, it is necessarily continuous with the higher motions, so all its virtue is governed from there."

The world whose every virtue is governed by a higher body is this mass of the four elements, since no other world is continuous with the higher motions. Nor was Aristotle discussing the qualities of another world in that book, in which, certainly, there is no mention of plants or animals, but only of that which occurs through the elements, such as comets and other phenomena, and common affections of air and water. He himself states this in the preface shortly beforehand.

Therefore, let diviners cease using the testimony of the Philosopher in their annual prophecies, to present it as a justification for their deceit. The most prudent Aristotle, even in that very book, derogates from astrology. He seeks neither the causes of rains nor of the

Earth's movement nor of similar effects in the stars. He argues the variety of such things comes from how the heat of the Sun affects them differently, not from the diversity of the constellations. Therefore, the matter is contained within the category of meteorological phenomena. More perfect bodies, lacking life, such as gems and metals, are digested and formed by the force of radiant heat, just as they coalesce from lower matter.

Nor does it hinder our argument that this heavenly heat proceeds from light, even though light does not reach the subterranean places where the most precious compounds are generated. Certain Platonists believe light penetrates all bodies – although it does not seem to appear within the densest bodies or disperse through the rarest ones – but heat diffused from light might reach where light itself does not arrive, just as the heat of fire can be felt through a wall, and yet no flame can be seen.

Light indeed might not enter mountains and caves, for it is repelled by the opacity and density of the material bodies, which are not of suitable disposition to admit light. Yet light might send its heat within, because, although such bodies cannot be illuminated, they can be heated, even more than those things rare and transparent.

The mixture of such things by the heavens, and by secondary causes, we will discuss in the resolution of the fourth argument.

The remaining matter to discuss is those things which live by the influence of heavenly heat. Since this quality of heavenly heat holds the highest degree in bodies, it is able to perfect the bodies themselves, and these bodies are closely subordinated to life. Heat joins the extremes together, life to the body and the body to life.

In all living things, between the material body, the grosser dwelling-place, and the soul, the fountain of life, there is an intermediate, which we call the spirit. A most subtle and invisible body, most closely related to sidereal light and heat, in which life is especially present. Through it, life unfolds and spreads its powers throughout this visible realm.

This type of spirit lies hidden in the seminal matter. A more divine force primarily uses it as an instrument, as the artisan of vital works, serving in place of the soul from which it flows. It propagates the form of the generator into the matter it occupies. But these spirits are not useful for generating bodies, preserving them, or fulfilling the functions of the senses, if the celestial spirit, that is, the heavenly heat, is lacking. The heat is more mobile, purer, and more effective, and therefore closer to life. It strengthens the weaker lower spirit and, by this interaction, makes the spirit more akin to the soul.

It is no longer an argument that the heavens live because they animate, with their rays, those things that live. All things live through their own souls; they are propagated through the power of the soul implanted in seed. The heat of the heavens supports them, not in a life-giving fashion, but through arranging them most conveniently and closely for life, for the reason we mentioned. No one would say that the power of seeing, deriving from the soul, exists through light, although we do not see without light. Whether the life of the heavens can be demonstrated to others by reasoning or not, was debated by us in *The Concord of Plato and Aristotle*.

Thus it is evident that in the corporeal world, nothing happens without the heavens. Nevertheless, whether this or that happens is not a result of the heavens, but of secondary causes. The heavens produce such things as the secondary causes are themselves born to produce, whether those causes pertain to species or to the individual.

Chapter Five

Beyond the common influence of motion and light, there exists no power peculiar to the heavens.

The diffusion of heavenly heat is common to all stars, since it follows the entire celestial nature, just as light does. But whether the spheres do the same is doubtful; for if they are not luminous, they are not propagators of that heat. If they are luminous, the question is whether light through rarity – just as it becomes invisible – becomes ineffective towards us, as Avicenna writes in the book *On the Heavens*. Concerning the stars themselves, whatever comes within sight cannot be doubted, unless we deny them a celestial nature and equally the gift of light.

Beyond motion and light, and the life-giving heat which proceeds from light, no other influences descend from the stars, nor do other corporeal, effective qualities exist in them. Experience demonstrates this, as we have seen and will see more clearly in the following, since through motion and heat-giving light, the heavens seem to fulfil their proper duty everywhere.

Aristotle never states we are affected by the heavens, save through motion and heat. Averroes and Plotinus, each great within their respective traditions, most firmly assert this. As for influences that induce coldness, reason strongly denies their existence. All light produces heat, so all stars, whatever their luminescence, produce heat by a general and shared property. But consider the claim that through the specific powers of stars, it is appropriate for one to bring dryness, another cold, and yet another humidity. Such people argue nights during a full moon are warmer because the Moon's more abundant light generates more heat. Yet, they maintain, this does not prevent the Moon's own influence from cooling or moistening the air.

I ask such people whether they believe that heat, which they admit (like light) to be common to all stars, is of the kind we have described. That is, eminently containing all four qualities, and thus productive of all things in conjunction with secondary causes, though by itself diffusive only of its own nature. Or rather, do they believe that other properties are not

contained within it, but only heat, while cold, as distinct from heat, emanates instead from a particular virtue of some individual star?

Whichever option they choose, they fall, unless I am mistaken, into significant difficulties.

If they respond with the first, I will press them as follows. It is not consistent for something derived from the specific nature of a star – if they wish to speak of stars in this way – to be more imperfect than what belongs to them by their more universal nature. A narrower difference derived from a universal one always adds a degree of perfection. But a quality that contains all qualities is more perfect than one that is merely effective in producing cold. Therefore, if such a quality is attributed to the stars by their common and universal condition, a cooling influence will not be attributed to any particular star by its specific nature.

The other branch of the division remains. Here they falter no less, since nothing belonging to specific nature can contradict certain properties that derive from common nature. For instance, if stupidity is attributed to man insofar as he is human, or if, insofar as he is alive, he is said to possess the principle of internal motion, it cannot be that, insofar as he is a living being, a notion consistent with inanimate immobility could also apply to him. On the contrary, a particular degree differentiates what exists in a general nature. Thus, if it is proper to a living being not only to be moved externally but also internally, it must necessarily follow that the nature of an animal – a species of living being – includes the principle of some internal operation. Likewise, for a rational being, which is another species, there is a different internal operation.

By the same reasoning, if we consider the heavenly nature insofar as it is heavenly, the vivifying heat follows as a consequence. But no peculiar active power of coldness or dryness, which are qualities contrary to life, follows from the particular nature of any star.

As for the arguments of the opposing opinion, some have already been refuted, and others will likewise be addressed later. For instance, the belief that cold elements cannot be preserved by heavenly influence, and that other qualities arising universally from heat can only do so accidentally. Also, the claim that all substantial forms of bodies are not contained within the power of heavenly nature – all these points have been refuted in the preceding discussion. The same applies to the point that many things are generated by heavenly action where the light of the heavens does not reach.

Two arguments remain: the first, the belief that the air cannot so suddenly be changed from hot to cold, and indeed to intense cold – as is observed by experience – unless the incoming cold is the work of a new constellation. The second is the argument that the Moon, when carried beneath the Earth and even to the depths of the Earth, still causes the tides of the ocean. It does this when the lunar rays undoubtedly do not reach, so therefore it does this through an influence separate from either light or the heat that follows the light.

These matters, however, will be resolved later: the first, in chapter thirteen, where the effect of the Sun on lower things will be discussed. The second, when the cause of the ocean's reciprocation will be discussed extensively. For now, we will satisfy those asking how the Moon affects us during its new moon phase, even though it does not illuminate during that time.

Galen affirms that just as the Moon does not illuminate, neither does it affect us in any way during the new moon. For this reason, he makes the month consist of twenty-six days and twelve hours, the number of days during which the Moon's light effectively reaches us, with almost three days spent hidden. The Moon, however, acts upon us when it meets the Sun, in the manner one acts by doing nothing. By removing its light from bodies, it harms them, but the same Moon, when it grows, nourishes and fills those bodies more fully.

If the Moon's own light is present, though very faint and tenuous, during the new moon, it does not completely escape the sight. It could be believed to retain some effectiveness even from that light.

Chapter Six

The light of the Moon, just as that of the Sun, is vital; neither does it cause cold or humidity, except by accident.

Everything we have said may be referred to one point: this celestial heat is the universal craftsman of corporeal things. There is no reason to believe other emanations are breathed into earthly bodies by the stars, lest we attribute more to those superior bodies than is fitting, or grant less to the inferior ones. Let the reader recall only this: whatever is derived by an inferior nature from a superior one, because it proceeds from the latter and is received according to the capacity and condition of the recipient, necessarily becomes different and worse than it was in its first origin. Different because it is mixed with a foreign and alien nature, and worse because it belongs to an inferior nature. Being affected in other ways by manifold impressions necessarily taints and confuses it, with a mingling of many affections it received from a better place.

This very thing happens to celestial heat whenever it is received in the sublunary mass, for it falls from its natural action and perfection. This happens in two ways.

Firstly, although by nature it is always beneficial, it sometimes becomes harmful due to the weakness of the recipient. Secondly, although it produces none of the elemental qualities, as it is by its nature distinct from them, it degenerates due the actions of the elements, especially heat, to which it is closer in name and in nature. Therefore, it acts less as celestial heat, and more as fiery and elemental heat.

That these effects happen due to the defects of the material is evident. When heavenly heat finds matter akin to itself among the sublunary bodies, it is always proves both beneficial and life-giving. There is nothing more akin to it than spirit, and especially the human spirit, which is a sanguineous vapour – subtle, clear, and mobile – that corresponds in proportion to the heavens, as Aristotle and Avicenna write.

This heat of the heavens always nurtures and strengthens, so it is almost to the spirit what the spirit itself is to the denser body. If heat sometimes harms matter, it does so due to the weakness of the recipient. The proof of this is that the same ray simultaneously harms the weak and strengthens the strong. Here too, the saying holds true: "To the one who has, it is given; to the one who does not have, even what they have is taken away."

Therefore, the Sun itself does not harm matter, but rather we see weak matter collapsing under the weight of so much goodness, due to its own infirmity. Those things equal to the rays of the Sun gain more life and vigour the more they are exposed to its light. No one should think a consuming heat or dryness contrary to life flows from the Sun, just as neither suffocating or excessive moisture, nor chilling cold, flow from the Moon.

Otherwise, the waxing light of the Moon would not aid inherent generative powers, by which bodies are nourished and grow alongside it. Nor would the full Moon, as Hippocrates writes in his book *On the Eight-Month Birth*, be useful for conceptions, promoting fertility in both women and the sea. Nor would it be true, as Aristotle says, that the Moon is akin to a lesser Sun, and that it contributes to all generations and perfections. How could these things be true, if moonlight were not by its very nature nourishing, vital, and fertile, just as the light of the Sun and the other stars, which all share this property as something common to celestial bodies?

But, as we were saying, just as celestial heat sometimes becomes excessive due to recipient weakness, so too, because of the elementary nature into which it descends, this heat

nearly becomes elemental heat. You would scarcely recognise it as celestial, except in spiritual substances, which of all bodies are the most similar to the heavens.

This celestial heat infuses spiritual substances, perfecting all mixtures and everywhere assisting in the work of the soul. Yet, when the heat encounters hard, rough, dense, watery, or impure bodies, it degenerates from its celestial nature, and nearly behaves as elemental heat often does. For if this heat is strong, it burns, dries out, and reduces to ash; conversely, if it is weak and slight, it causes fluidity and dissolves moisture.

Thus, celestial heat adapts to the conditions of the material. From this arose the opinion that the Sun creates dryness and the Moon increases moisture, since the Sun's heat is more intense, while the Moon's is milder. But in suitable subjects, the Sun's rays will neither dry beneficial moisture, nor will the Moon create useless or harmful humidity. Both luminaries will instead act according to their nature, the Moon more gently and the Sun more forcefully.

But by accident, through the influence of foreign matter, they produce contrary effects: the Sun dries, and the Moon moistens. For the Sun's rays, when they are closer to us, as in northern signs, or when they strike at more direct angles, as at noon, or when they gather in concave, rough, and resistant surfaces, become compressed and repelled. The rays break apart with the fiery property they acquire through such violence or infection, and they dry and scorch the bodies on which they fall.

Conversely, the Moon, with its slight and gentle heat, dissolves the moisture it finds in a humid and fluid body, making it even more fluid. It does not bring with it any cold or aqueous moisture, but dissolves, draws out, and spreads the moisture already present in the aqueous and cold body.

It is the nature of heat that, if it is stronger, it consumes the moisture it draws out from bodies. If weaker, it still draws out that moisture – it is the same heat, of course – but, being

weak, it fails to consume the moisture it has drawn out. Thus, by accident, the Moon indeed moistens excessively, and the Sun dries out.

Both Sun and Moon produce coldness by accident, for, as Aristotle writes, both are principles of cold and heat. Both the beginning and the end of these qualities are determined by the motions of these celestial bodies.

The same author clarifies how this should be understood. For he says: "The Sun causes winter and summer throughout the year, and likewise, the Moon does this over the course of a month. But there is this difference: the Sun does so through its approach and withdrawal, whereas the Moon does not do so in this way, but one effect occurs during its waxing light and the other during its waning."

When the Sun moves far from us, it exposes us to the cold and is therefore said to cause cold. Likewise, the Moon, when it is repeatedly deprived of its light at the new moon, is said to cause cold. Not because it brings coldness, but because it protects us from the nocturnal chill less effectively than usual. However, it is worth examining what Aristotle says in *On the Generation of Animals*. That is, the times of the waning moon are wetter and colder, even though it is commonly agreed that as the Moon wanes, it dries out moisture.

I resolve this like so: during the Moon's waning, moisture increases – not originating from the Moon, but from the lower elements to which the Moon offers less resistance, being weakened by heat and hidden for most of the night near the horizon. That moisture is thus also aqueous, unhealthy, and excremental. From this, as the new moon approaches, come many vapours – the seed of rains – and menstrual flows are generally more abundant, as Aristotle writes in *History of Animals* and *On the Generation of Animals.*

But when the Moon waxes, moisture increases. Either because the moisture already present in bodies becomes more fluid, or because it is enhanced in a more life-giving way through the influence of the Moon's warmth.

Aristotle believes that, due to the waxing of the Moon, sea urchins and similar creatures become fuller. This is because those beings, being cold and bloodless, are more abundantly nourished by the Moon's light. As they warm in a way more conducive to life, they digest better, and consequently, they become more succulent and fit.

Therefore, humidities flow both during the Moon's waxing and waning, but of different kinds. During the waxing, they are beneficial; during the waning, they are harmful. It becomes clear that the Moon does not moisten because it is cold and humid – such moisture increases when the Moon wanes – but because it is vivaciously heating. Under its abundant light, bodies become more humid and robust, and are not made humid in any way other than by the power of heat. This aids nourishing forces and where appropriate, draws out humours from the innermost parts to the outermost. Bloodletting is also most advantageous during this time. The astrologer Haly Hamec was greatly mistaken when he advised cutting veins while the Moon was waning.

Let us confidently conclude that the moisture which increases along with the Moon, increasing due to its influence, is the healthiest kind of moisture. This moisture neither loosens the body through flux nor destroys it through cold, but rather makes it stronger and more vigorous. This is supported by well-established medical experience, confirmed by all physicians: those who fall ill at the beginning of the month bear the injury of illness more strongly. When the Moon waxes, life can scarcely abandon those otherwise at death's door.

Moreover, both the Sun and the Moon can cause cold, not only by withdrawing their light from us but also by acting upon us, although even this happens incidentally. The Sun, for instance, by killing through excessive desiccation. Or by drawing vital heat outward. Or by generating rains from vaporous maritime exhalations, thereby producing more moisture than it dissipates. Or by stirring up winds, or through other causes.

The Moon, on the other hand, through its faint heat and its tendency to open and rarefy bodily pathways, introduces nocturnal cold more easily into us through the more exposed channels. We accordingly see the phenomenon – about which many are mistaken, believing the Moon to be cold – of numbness and coldness afflicting those sleeping under lunar rays. The weaker ray of the star makes a way into the body for this numbness and cold, which comes from the earth and water, filling the air throughout the night.

In this way, the rays of the stars both cool and sometimes dry out or moisten. Sometimes they fall upon hard bodies, sometimes upon the damp and watery. Sometimes they beneficially warm. Sometimes they are harmful, not through their own fault, but through the weakness of the recipient.

Chapter Seven

The doctrines of the astrologers cannot be defended, if as Ibn Ezra thought, all the stars are considered hot.

It would be enough for astrologers if one star produced dryness, another moisture, and others produce other qualities. But even Abraham Ibn Ezra, prominent in the profession of astrology, contends that the stars are only producers of heat. Nor can it be otherwise believed about luminous and perpetually moving bodies. Yet some stars are said to be cold because they do not impart as much heat to us as is sufficient for our constitution.

Saturn is accused of coldness because, being far from the Earth and smaller than Jupiter, it warms the lower regions of nature less than it should. Therefore, when it is the ruler of a nativity, it signifies death. Not due to an infliction of coldness, but because of a lack of heat.

I praise Ibn Ezra for thinking correctly about the heat of the stars, but he loved his profession too much and did not perceive that its teachings necessarily contradict the truth.

Let us consider what he says about Saturn, that it is cold because it is insufficiently hot and thus causes death. This reasoning does not apply to other cases, nor does it apply universally to Saturn. Since a weakly hot planet moistens incidentally, it does not dry out; yet the astrologers claim that Saturn is dry.

Moreover, under this reasoning, it must follow that all fixed stars, especially those below the first degree of magnitude, are colder than Saturn, since they are both smaller and farther from Earth. However, stars are not cold, save that they insufficiently hot. The Heart of the Lion (Regulus) would be a cold star by Ibn Ezra's reasoning, though astrologers declare it the most blazing.

Even among the planets, if we wish to examine which star heats more and which less according to Ibn Ezra's principle, we arrive at conclusions inconsistent with the statements of astrologers. Three factors will almost certainly influence the intensity of heat: the magnitude of the light, its density, and its proximity.

It has not been definitively established how much magnitude outweighs density, how much density outweighs magnitude, or how much proximity itself outweighs either or both. Therefore, for those who wish to reason about it, the matter will remain uncertain. Nor will the senses be able to judge, since, apart from the rays of the Sun and Moon, the rays of other celestial bodies are not perceived. This first and foremost undermines astrologers, whose art becomes meaningless if the powers of celestial rays remain ambiguous.

Those following conjecture will arrive at different conclusions from what they had previously determined. Those considering size will conclude that the rays of Mars are less hot than those of Saturn and Jupiter.

But if they respond that Mars is hotter because its light comes from closer proximity and from a more compact source, this proximity cannot compensate so much for its diminutive size that Saturn, nearly fifty times larger, would freeze while Mars burns. Otherwise, if the smallness of a body detracts so little from the effectiveness of its light, and the abundance of light increases so much with proximity, we would be more warmed by Venus than by any other star except the Sun and Moon. For nourishing Cytherea, who smiles down from above, and shines with heavenly brilliance far and wide, is the only star that casts a shadow. Nor is there any star closer to Earth, as commonly believed, whose sphere does not exceed the size of Venus'.

And yet, many astrologers condemn Venus for coldness, just as they do not doubt that Jupiter and Mars greatly surpass her in heat. If they again refer to the imagined size of the body, the argument then proceeds with even less reason. Jupiter surpasses the disk of Venus by not much more than Saturn does – given the scale of such great immensity – and Jupiter is also not much closer to Earth than Saturn. Yet astrologers still define heat in such a way that Jupiter warms bodies far more than Venus, and Saturn far less. Indeed, they claim that Venus and Jupiter nurture bodies, while Saturn mortifies them with coldness.

Chapter Eight

Objection against those things which have been said.

But let it be so, someone might say, that the differences of rays are neither known to astrologers nor can they be known; this pertains to another question. Now we must consider potential diversity in the heavenly rays. Although all are by nature hot and life-giving, perhaps one ray is relatively cold and contrary to life, compared to the others, on account of

the abundance or scarcity of light, or by thinness or effectiveness. Perhaps another ray is dry, another moist, either by its own nature or by the contagion of elementary matter.

Although the heavens are a universal cause, perhaps they behave differently during their continuous motion, and cooperate differently with inferior causes depending on the varying configuration of the stars. Perhaps variety of effects does not entirely arise from inferior causes, but also from the varying disposition of the universal cause itself. Especially if the stars differ from each other not only in the quality or quantity of light, but also in their other qualities and peculiar properties. The fourth argument against us asserted this.

Then through motion and heat – common to all the stars insofar as they are celestial – a common efficiency owed to the heavens might also occur. Through the influences that follow the particular natures of the stars, something more particular might arise from them. Through the various configurations, placements, and relations of the same star to other stars, to regions of the heavens, and to earthly bodies, the operation of inferior causes is not inconsiderably varied.

And thus, the first argument of astrologers regarding the effects, even the diversity of them, still potentially holds, referring to celestial causes.

Chapter Nine

The objection is resolved. It is shown that neither the specific nor the individual differences of things depend on the motion of the heavens.

A timely objection, one that recalls many things we might oppose. The worse the cause, the more it loses, the more it tries to defend itself. On the other hand, truth is like fire, which shines brighter the more it is struck. Thus, we will respond.

We will first clarify what kind of diversity exists in celestial influence, whether due to the differing nature of multiple stars or to the varying motion and change of a single star. We will demonstrate this through evidence and natural reason. The errors of our opponents in these matters demand detailed effort, more than can be dealt with in passing; therefore, they will be addressed in the following books.

Here, once we have explained how one constellation differs from another, we will consider how much authority that diversity holds in producing variations in lower effects.

Our assertion will be confirmed: primary variance in lower effects, and indeed almost their entire variance, derives from secondary causes. The deception of astrologers will be further exposed, with their claim to predict such distinctions based on celestial causes.

The heavens act upon us through motion and light. Motion accomplishes three things: to move, to heat, and to bring light. The third of these will be addressed later, when we discuss light. However, the claim that motion itself produces heat is a difficult question and must be examined separately, in the books of philosophy, as it pertains little to the matter of astrology. How motion causes movement we have previously explained. Namely, it produces motion in the way the motion of the animal heart produces motion.

Let us therefore examine, as far as motion is concerned, whether some stars move differently than others, and whether the same stars move differently at different times. Then we shall consider light.

The motions of the stars differ in three ways: first, some move more quickly, others more slowly; second, some are carried by a greater number of motions, others by fewer; third, based on the regions in which they move, some occupy higher seats and traverse broader spaces than others.

Aristotle does not believe that the multiplicity or scarcity of motions pertains to the diversity of things affected or moved. Rather, he holds that this occurs according to the

dignity of the movers. What is nobler achieves its end with fewer motions. What is less noble requires many motions to do so.

Regarding the speed and slowness of stars, nothing is sufficiently certain. Aurelius Macrobius, following earlier authorities, claims all planets proceed at an equal pace. This view is supported by Ibn Ezra, who places the Sun, Venus, and Mercury in the same sphere, separated by the positions of their epicycles. However, those authorities who argue the planets are unequal in speed are in conflict with each other. Alpetragius asserts that stars which appear faster are actually slower. Others observe the time of their return, which necessarily leads to error unless one examines the proportion of delays with great precision.

If indeed the stars heat by motion, they will heat more through swifter motion. But as to the primacy of motions, this creates no variation, since lower motions depend on the motion of the heavens to the extent that the first and circular motion exists. It makes no difference whether it is slower or faster. A stone would not move downward, nor fire upward, if the heavens were at rest; but the stone does not descend, nor does the fire ascend, more swiftly because the heavens revolve more swiftly. Stone and fire only derive whence they may be moved from the heavens, just as from the universal nature animating any motion. The form of motion comes from its substance, and the slackening or intensification of it derives from the mover, from impetus, from figure, and from other similar conditions.

Hence Saturn will not move us differently, merely because it moves more slowly than Mars, which is considered swifter. The astrologers claim the slower planets give more slowly that which they bestow, but this will later be refuted. We assert that nothing is given to us through their motion, save that we too are moved by them. Whether we are moved by them does not change, regardless of whether they revolve more slowly or more swiftly.

Moreover, different things are not moved by the same planet in different ways, merely because it itself moves differently at different times. It is the firm teaching of philosophers

that celestial motions are always similar to themselves and equal to themselves. They do not restrain the stars, nor wear them out, even if this seems so to us, a matter attributed by mathematicians to eccentric circles or to diverse motions opposing one another, or to other things of that kind.

There can only be such a diversity in the sense that, when carried down through the lowest points of the epicycles, they might influence us more favourably, being closer. However, this disagrees with the decrees of astrologers rather than aligns with them, as will be explained in the following sections.

Concerning the dignity and rank of the movers, or of the bodies that are moved, the question arises whether all act equally, or whether one mover acts in one way, and another in a different way. There are those who think everything that happens is caused by the nearest cause, and that the higher bodies do nothing more than move the nearest cause. But one deals with so many intermediary causes interposed, not in the sense that one thing acts directly on another, but in the sense that things are accomplished in their proper order. No effect can come to be except through a related cause, and that cause is less effective due to the constraints of matter. The lower bodies are more tightly bound by such constraints, so they cannot move without first being moved.

Since lower bodies cannot be immediately and directly moved by the noblest and highest causes, it is necessary for there to be as many intermediate causes as there are ranks in the hierarchy of causes and dignities. Some believe these are produced by as many causes, not because different parts of the work are assigned to different causes (they are interconnected by an essential bond), but because, for the same actions to be performed, one necessarily depends on another in a tripartite chain.

Others claim that in the things that come to pass, the higher cause and the lower cause are not the same, but rather act according to the degrees of perfection contained within the

substance of the work. They argue the higher cause also depends on lower causes, with a gradual progression of order among them. Therefore, they suggest that the more general principle in the work pertains to a more universal cause. That is, in its effect, the more excellent a cause is, the more universal it is.

Thus, the things which comes to pass derive their existence from God; their substance, from the cause that follows; their material form, from the cause that comes next, until the proper species and nature of the thing are reached, which is also derived from its specific and proximate cause.

Whichever of the two positions we may hold, it is clear that not only do individual differences not arise from celestial causes, but not even species-wide differences of things, inasmuch as we consider this efficiency of motion.

Chapter Ten

Stars other than the Sun and Moon either have no effect on us or certainly very little.

We have spoken of motion; what remains is light. But first it is necessary to consider the influence the stars have on us through motion and the influence they have through light, and distinguish between the two. The power of the former comes from the moving soul more than the moved body; the power of the latter comes from the very body of the planet. The former pertains more to the spheres than to the stars, the latter to the stars more than the spheres. In the former, lower things depend on higher things, since the planets and the Sun are carried around, subject to the motion of the first sphere. About light, almost all philosophers agree, not only the Moon but also the other stars are illuminated by the Sun.

Furthermore, those things higher in that virtue by which they move other things move us more. But the influence of light on us, *ceteris paribus*, is more powerful when it comes from a closer location.

It is not clear, as we will explain, whether the lights of the higher bodies act on us, or only those of the Moon and the Sun. Moreover, whether the others do not reach us effectively because of smallness or because of the distance of the luminous bodies. Concerning motion, there is no doubt that higher things are more powerful.

From all this it can be gathered, as philosophers say, that by a certain essential order, a series and a chain of causes is connected, and acts downwards, pertaining most of all to this efficiency of motion. When this procession and order of causes is understood more with regard to moving souls than bodies, it is proper to it that second things depend on first things. Moreover, a higher cause has more strength and power than any lower cause. The lower does not act if the higher ceases.

We do not deny that the heat of the Sun causes generative heats in the essential order of a higher cause, but this order does not extend further. This is not that complication of causes drawn from the first to the lowest through intermediate degrees, but something more fully found in the series of movers, insofar as they are movers.

However, in both cases, one observes a fourfold progression. In motion, the first place is held by that sphere, or the universe, which is turned by daily agitation, from which motion is communicated to the rest. Next follows the chorus of planets, running contrary over the poles of the zodiac. Nor are there more degrees to be distinguished, since the planets neither move one another, nor are moved by one another. A single mobile thing, as it is carried along by the first mobile sphere, moves by its own motion as well (called the ‘motion of diversity’ by Plato), moving the ether, and the highest air.

From this, in the fourth place, motion comes to us and to the lower bodies. All particular motions of natural things are enlivened from it.

In light (meaning the heat flowing from light), the source of all influence and the eye of the world is the Sun. The Sun illuminates the Moon; the Moon affects the air; the air affects all bodies that live under and in it. But we are moved by the first mobile through the planets, and we are illuminated by the Sun differently than by the Moon.

We recount these things so that, before a discussion is held about sidereal influences, we might establish that it is unclear whether or not higher influences reach our region. But that which astrologers believe about certain smaller stars might also be believed about all the planets, except for the Sun and Moon. Since it could first be objected to such a thesis that celestial bodies, as causes, cannot remain without effect, I wanted to show that this order does not pertain to illuminating bodies but rather to the moving powers.

Astrologers cannot say that the stars, whose influences are not perceived, were created in vain by God, lest they admit those stars be in vain. The astrologers themselves freely admit this very point. Otherwise, perhaps this lofty candelabrum, shining with myriad lights, was made primarily to bring nocturnal light to our eyes and illuminate the burrows of light-fleeing moles.

But why so many stars, if one Sun and one Moon suffice for us? Because it was fitting for the nature of the heavens, in accordance with the order of things, and required by the perfection of the entire universe. And even if not all stars illuminate us, it does not follow that they cannot provide some other use and benefit. Thus argues Averroes: “The Sun and Moon act upon us; therefore, the others stars must as well, since they are all of the same nature.”

This form of reasoning is appealing and reminiscent of Aristotle, who similarly argues, “The Moon does not move by its own motion but along with the sphere, as its spots

indicate; therefore, the same judgement must apply to the others, since all celestial bodies share one nature."

Thus, by following these same steps, we would also conclude: the Sun generates heat; therefore, so does the Moon, since they are all of the same nature.

Reason proves only this: that the conditions of all celestial bodies are the same, insofar as they are considered absolutely in themselves. But reason wavers and breaks, because when compared to others, these bodies are not compared in the same way.

If the Sun's nature is to act the same as Saturn, it does not follow that both will act the same upon us. One is near to us, the other distant. Thus, those who argue that only the Sun and the Moon act upon us have reasons for their suspicion, even though all celestial bodies share the same nature. For the effective action of light upon us is primarily determined by three conditions of the luminous body: size, density, and proximity.

All these qualities are found in the Sun in a preeminent way. It is nearest to us, especially if placed above the Moon, as the ancients and later Ptolemy, Geber, and Theon argue. It is also so vast in body that it exceeds the size of the planets by more than one and a half times. It is the most luminous of all, shining with the densest light. Meanwhile, the Moon is so close to us that it cannot fail to affect what it touches. Hence, moonlight is necessarily effective, almost identical to the solar light.

You will not find such conditions in the other stars, so that what holds regarding the Moon and the Sun does not necessarily hold for the others. Perhaps distance itself is the issue with the lights of the eighth sphere, even the greatest ones. The stars of Jupiter and Saturn are closer to the Earth, but also smaller. It is said that the largest fixed stars contain the mass of the Earth a hundred times sevenfold, but Jupiter only contains it ninety-five times, and Saturn only ninety times and once more. These figures, however, have not been stated with absolute certainty. If we follow experience, we see that those fixed stars, though of such vast size, do

not send their rays to us at night, even if they shine together with Saturn and Jupiter above the horizon.

Mars is much closer to Earth, and smaller again, for it has a proportion to Earth slightly greater than one and a half times. The Sun is nearly a hundred time greater than Mars, and one hundred and sixty-six times greater than Earth. Why would someone who admits the Sun's forces on bodies, believe something so absurd as the influences of the Martian star, when it is much smaller and more remote from Earth?

Let him believe the same about the star Venus, perhaps farther from us than the Sun, and certainly much smaller than even Earth itself. It is thought to be not even a twentieth part the size of Earth. Mercury is smaller than the Moon and likewise farther from us. What wonder that Mercury is also so little seen, yet, astrologers are accustomed to attribute it great significance. Aristotle is alleged to support those thinking this way. Especially when he discusses motion, as in the book *On the Heavens* and the highest sphere, and in the final part of *Physics*, since evidently all bodies are moved by these motions.

But when Aristotle speaks of that life-giving warmth, which nurtures and perfects the generation of things, he refers only to the Sun – such as when he claims man is generated by the Sun and man – or else to the Sun and the Moon, as in *On the Generation of Animals*, where he mentions both. Thus, if anyone bases the significance of the other stars on Aristotle's opinion, they would fail to find the relevant statements in his actual philosophy.

As for us, we assert that whatever reaches downward from the other stars is slight and minimal. Perhaps the nocturnal light of the stars somewhat softens the air, making it more suitable for generation.

However, if someone were to attribute all generation to the Sun alone, they might decide that what the Sun accomplishes during the day with its own light, it also accomplishes at night through light reflected by the Moon. It would be light as through a mirror, whence it

is redirected to the Earth. This arrangement, established most wisely by nature, accounts for Earth's frailty, for Earth cannot continuously endure the Sun's rays. Thus, at night, the Moon receives and reflects these rays, weakened and diminished, making them more suited to Earth's weakness. In this way, living things are neither entirely deprived of vital light nor overwhelmed by its fullness, which might otherwise cause them to falter.

In this way, the return of the Sun in early spring – having been distant throughout the entire winter – is even more beneficial than if it had remained constantly near us. Our frailty is so overwhelmed by the excessive goodness of the heavens that even the Moon does not reflect the Sun's rays back to us in full. Instead, the Moon sometimes does it more sparingly, sometimes more abundantly, according to its various positions relative to the Sun. Divine Providence thus arranges matters for our benefit, ensuring that the nearest celestial body does not possess its own light for this very reason.

If you consider all of nature, you will see no indication that inferior things are nourished by any heat other than that of the Sun. We do not stubbornly insist on this point and are willing to admit, as many philosophers believe, that the stars might share in this function. However, we nonetheless refute astrologers who believe that in some natal charts – if indeed the stars have any influence on human births – pre-eminence should sometimes be given to planets other than the Sun or Moon, depending on whether the nativity is diurnal or nocturnal. Astrologers even claim that the Sun itself can be overpowered by the rays of other planets and negatively affected, as though it were merely one among their number and could be reduced entirely to their rank.

But let us address these matters later. For now, we merely note that clear sensory evidence more readily refutes those who believe stars other than the Sun have great power in altering lower things than those who argue that such stars do almost nothing. The latter view attributes the entirety of illumination and vitalisation of the lower world to the solar lamp.

From the Sun, the lunar light is also kindled for us during the night, like a lamp that illuminates our darkness.

Chapter Eleven

How the stars, while being the same, might act differently upon us at different times.

Let us grant to the astrologers – though we strongly deny it ourselves – that something flows down upon us from all the stars. The question then becomes, whether the stars always grant the same influence in the same way, or whether they grant different influences. If they do not grant the same, does that diversity result in varied effects on the lower world?

Astrologers argue for unique powers belonging to each star, beyond motion and light, based on the nobility of the heavens and the powers of certain bodies thought to originate therein. We will address those arguments elsewhere. Here, we shall only consider the very diversity of the stars themselves. Since one star differs from another, and light and motion are common to all, they must necessarily possess certain unique qualities by which they differ from one another.

St Paul said, “One star differs from another in glory.” What if, just as circular motion is common to all stars, they also differ in motion, so one moves faster and another slower – though not all authorities agree even on this – and likewise in light. While the stars share light in general, perhaps they differ in its qualities, so one star’s light is more compact and abundant, another’s more sparse or thin?

There will be some who believe a star varies more within itself than one star differs from another, and yet even in this case, the difference would only be one of density and rarity. It would follow that stellar influence also varies: denser, larger, and nearer stars emit more

light and heat, while rarer, smaller, and more distant ones emit less. Ultimately, the breath from all stars is the same, warm light and luminous heat, which brings health, life, and nourishment to bodies. The difference lies only in degree. Some stars inspire this breath more abundantly, others more thinly; some from nearby, and others from afar.

What shall we decide about the same star on account of its perpetual revolving motion? The opinion of the Peripatetics is that stars do not change their quality but only their position, except for the Moon, which shines with changeable light due to its revolutions towards the Sun and is illuminated more or less at intervals.

Depending on the turning it has made, the Moon reflects solar light either more abundantly or less abundantly and, along with its light, its heat. Thus, it nearly abandons us during the new moon, when the part which faces us is deprived of light. It warms and heats us more during the full moon, as it increases more or decreases less.

Why could there not be variety among the stars, which shine with stable and proper light? For this reason, almost all frequent changes, if they have any heavenly cause, are usually attributed to the Moon, because it is changeable not only in position but also in quality, and affects us more closely on that account.

For the other planets, change occurs solely through the movement of their positions. This results in no variety of influence, save that they affect us more intensely or more weakly depending on whether migration brings them closer or farther from us. Moreover, their motion is twofold: universal and proper.

The universal motion carries them daily, lifting them above the Earth and drawing them down, back below the horizon. From this arises their first variety: from their height, the planets hurl rays most forcefully because they fall more directly at a perpendicular angle. Therefore, the closer the planets approach the zenith, the more powerfully they affect us; the farther they descend from it, the weaker their effect.

We must examine whether the planets still affect us when they are below the horizon. While they are near the horizon and not yet entirely obscured, they certainly exert some influence, albeit minimal, as their rays still reach us obliquely. However, when they are entirely concealed below the horizon, and are much farther removed from us, if I were to believe they have no effect, sensory experience would support this belief, and reason would not contradict it. This is especially true, given what we have argued thus far: that nothing reaches us from the heavens except as conveyed through light. Avicenna also states this in his meteorological writings, calling light the vehicle of all celestial virtues. Albertus Magnus confirms it in his book *On Sleep and Wakefulness*.

Therefore, as light does not reach us under such conditions, no celestial influence can reach us either. We say that the Sun alone remains present even at night: it appoints its sister, the Moon, as its substitute. The Moon shines upon us with the light the Sun has imparted to her.

Perhaps one might also say this: since the upper air is continuous with the lower, the presence of the Sun in the upper air might somehow warm the lower, such that the lower air would be colder if no Sun at all illuminated any part of the air. But if this amounts to anything, sight and touch suggest it is negligible.

If astrologers have invented certain powers for the stars – powers to which the entire mass of the Earth poses no obstacle – they should not delude themselves so badly, even in their dreams, as to deny that these powers operate on us more purely and effectively when they emanate through air alone. More so than when they must penetrate the brute and densely thick mass of the Earth. And if the astrologers do not concede this, who could defend them from insanity?

They imagine the powers of the stars sluggish, inactive, and weak in the twelfth house, which, rising just above the horizon and nearest to the east, is only one mansion away

from mid-heaven. Yet they claim these same powers have great force and effectiveness in the lowest part of the Earth. But such errors will be addressed later. For now, we are only discussing conclusions based on reason.

We have spoken about the universal motion. By their own motion, planets are carried now to the south, now to the north, which also happens with the fixed stars, according to the opinion of the younger generation. The Sun does the same, not because it deviates from the orbit it once occupied, but because that oblique orbit now brings it closer to us, now farther away: closer in the north, farther in the south.

Hence arises another variety of influence. Rays inclined towards us have greater effectiveness, while those receding towards the south have less.

Beyond these considerations about the variable nature of stars, whatever else is imagined is utterly vain and irrational. To take an example of what astrologers propose: the same star is thought to act differently and to acquire vastly different powers for influencing, depending on its position in the twelve houses, on the signs it passes through, or on the stars (whether fixed or wandering) with which it is associated at certain intervals, called ‘aspects’. Against this error, the entire sixth book will be dedicated.

Here, at the beginning of this chapter, we shall oppose them with the authority of the Peripatetics, who deny any change in the stars other than a change of position, except in the case of the Moon. If the Peripatetics merely exclude a corrupting and harmful change, there is no need to exclude the Moon, since it is not altered by the Sun in this way – nor, as we shall see, by the planets. Yet astrologers do not exempt the stars from changes, as they claim these alterations do not affect their substance but instead weaken their powers and faculties. But this will be addressed later.

What remains uncertain is whether the Moon receives the rays of other planets as it does those of the Sun. This seems probable because its nature appears more suited to

receiving incidental light than to producing its own light. Moreover, since it is the lowest of all the heavenly bodies, it seems to have been especially prepared for this role.

However, neither the authority of the ancients nor sense itself supports this. When the Moon is in conjunction with the Sun in its new moon phase, if it is then opposed to the rays of Jupiter or Mars, it ought to return their light to us more fully. Yet it is nevertheless acknowledged to have none of their rays or light.

We touch upon this question because, if the Moon also draws light from the others, the planets would become more effective towards us. Insofar as they were joined to the Moon, their power would be transmitted to us through it. Their power would thereby reach us better than the power on its own. But if this were to happen, it would happen entirely differently than astrologers imagine. They think the Moon transmits the rays of the star with which it is found. But clearly the farther the Moon moves away from a star, the more of that star's light is communicated to us through it, and the less, the less they are distant; very little light, or nothing, when they are not distant at all.

I am swayed by clear experience here. When the Moon is in conjunction with the Sun, that is, in the new moon phase, it does not transmit the rays of the Sun to us. Indeed, the matter of its bulk interferes. How much less, then, are the rays of the other planets, already far weaker than the Sun's and more distant from the Moon!

See how much they are deceived, those who believe a day and a horoscope to be fortunate when the Moon meets with beneficent stars. Or unfortunate when it meets with maleficent ones. For the Moon to meet with stars is really the light influences of those stars being intercepted by the Moon for us.

Perhaps, the morning planet also has some prerogative in altering lower things. It rises before the Sun and claims the air for itself before it is wholly occupied by the Sun. But this, if it is anything, can hardly have much significance.

It remains to be examined whether a new force emerges from the mixture of rays, one producing a new effect that individual rays would not produce separately. Plotinus denies that this can happen with rays. Specifically, he rejects the notion that their mixture could generate a new power or new form, because rays are not bodies like liquids. Nor are rays qualities affixed to bodies, to be infused or altered in some way according to their nature.

Therefore, it seems true to that philosopher that rays do not do this. Mixtures are sometimes transformed into another form, coalescing from many into one, but not without the destruction of individual qualities. It is not easy to think this of rays.

However, if we allow astrologers to claim that the rays, or the heat derived from the rays, can mix, we assert that the rays always mix together. Moreover, there are no rays incapable of mixing through the relationships astrologers call aspects.

Therefore, the mixture of the present hour, moment, year, month, and day is not different from the mixture of rays at another time. Save for those previously-mentioned causes that vary the actions of the stars. That is, the temperament of night is different from that of day; or when the stars recede to the south, or when they incline to the north. These are the reasons whence the greater or lesser intensity of heat originates.

Chapter Twelve

Which variations of effects can be reduced to the heavens, and which cannot.

Let us consider the mixture of all rays in the air. Within it, there is something substantial, and something accidental.

The substantial is the being of one light, or one heat, gathered or resulting from all the lights of the sky. This indeed is perpetual and unchangeable. But if one particular ray is now

more intense, or another more relaxed… that is accidental, and it changes constantly according to the continuous change of the celestial bodies.

The reason for this distinction is clear. Of the sky, which we know to be the source of this heat, something substantial can be said, just as we call substantial those things which inseparably follow the substance of a thing. Within the sky we find the imperishable body, the first of all bodies, the circular shape, the circular motion, and light animating all with its own heat. If indeed the stars have their own powers, those are in turn the substantial powers of the stars. But there is also something in the sky and the stars that is variable, and hence accidental. In the stars, this the change of position alone, and in the Moon, the alternation of light.

That which in the mixture arises from the substantial aspect of heavenly rays, we call substantial, and that which is accidental, we call accidental. To encompass indeed the Saturnian, Jovian, and Solar powers, and others similarly, is to consider what is substantially present. The possession of powers more intrinsic or more diminished according to the variety of the rays is said to be accidental.

Socrates, aided by that higher power, which is certainly not a mutable power – otherwise, it would not always be observed present in all acting causes – produces a man insofar as he is a man. He produces this man insofar as he is generated from this seed and this material. For this substantial effect, whether you consider the condition, or the nature, or the individual character, any constellation is indifferent.

That which arises from the diversity of constellations – that is, from the varying positions and configurations of the stars – causes more or less heat to be poured into the air towards the earth. As a result of a different mixture of rays, it produces a new proportion and measure of warm light. This is accidental in celestial matters. It likewise causes diversity in earthly things, so a better conception occurs at the full moon, the foetus grows more when the

moon waxes, and seeds are better affected by a temperate state of the heavens, and therefore better offspring are produced.

This diversity, arising in the generation of substances from the varying positions of celestial bodies, we call accidental and adventitious. As we have explained, the proper and substantial mark of the conceived offspring depends on its proximate principle and its own substantial matter. Accidental properties are more significantly influenced by the accidents of the seed and the matter, since these are more closely related, proximate, and intimate than the external disposition of the surrounding air. Daily experience clearly demonstrates this. Thus, if a son is not shaped according to the seed of his parents, and does not derive his likeness from it, Aristotle says the son should be counted among monstrosities.

Nothing prevents us from considering the stars as universal secondary causes, since the variation of the stars may alter the arrangement of the air and, consequently, the condition of bodies already generated or in the process of being generated. However, as we have said, this is an external and very general change. What pertains to substance – since it concerns the more intimate and proximate qualities – undoubtedly derives from proper causes. For this reason, it cannot in any way be provided by the heavens.

This is indeed true in matters of the body that are complete substances, because in all of them proximate efficient causes are present. Or because they correspond to those things in proportion, such as what is generated from putrefaction and inanimate mixtures. We will speak about this in addressing the fourth argument.

The heavens indeed cause changes in the air, concerning heat, cold, moisture, and dryness, without any intermediary cause. These changes, however, are universal because the heavens produce them beneficially by heating through their own power. Other effects occur incidentally based on the condition of the material. For example, under the same heat, mud hardens, while wax melts. Under the same Sun, linen becomes white as it is washed, while

the face of the washer darkens. Nevertheless, this is an accidental change. What we call accidental in celestial constellations – the position and configuration of the stars, from which the force of the rays is intensified or diminished – has the greatest influence on it. Thus, heat increases or decreases in the air to a greater or lesser degree.

For this very reason, the four seasons of the year change due to the varying movement of the Sun. The eastern rising and western setting cause almost the same four changes in the day. Between these primary qualities of bodies and inanimate mixtures, there are meteorological impressions that take on an intermediate position, whose efficient cause is the heavens, and whose inferior matter is the lower materials. Hence, their diversity depends more on celestial disposition than on the perfected bodies themselves.

For example, thunderstorms occur in spring and autumn, hailstorms in summer, and snow and rain in winter, though these are less dependent on the celestial disposition than the four absolute qualities. Rays affect material with their power, while meteorological phenomena move under the influence of rays but are formed from lower matter. Therefore, they vary greatly depending on the condition of that matter. We will explain this in more detail in the discussion of the third question.

In the case of perfect substances, which not only have matter but also their own efficient cause, whatever is substantive and proper to them is derived from their proper causes. The heavens cooperate as a universal cause through its immobile influence. However, it also allows for some extrinsic and general change. Astrologers can say nothing about this, since such change depends not on the celestial causes they have invented, nor on the natal hour, but on other principles, as we will explain later. For now, we are only investigating what the heavens can cause and what they cannot. St Augustine did not think it absurd to consider that certain influences, based solely on the differences of bodies, could have astrological power.

He did not assert this was true, nor did he accuse those who thought differently. Rather, he elevated the fault of those who held such opinions, declaring it not so much an absurd opinion as one not entirely absurd. He adds context to the understanding of bodily differences, saying, “Just as we see the seasons of the year vary with the Sun’s ascensions and descensions, and certain kinds of things, such as sea urchins and shells, increase and decrease with the waxing and waning of the moon, and the marvellous tides of the ocean.”

To these words, you see nothing added that pertains to the generation of any perfect substance. Their diversities, which are chiefly corporeal, should not be referred to the stars, but to the proximate causes. Augustine immediately adds: “What is more related to the body than the sex of the body? And yet, under the same position of the stars, twins of different sexes could have been conceived.”

A little earlier, he confirms the same opinion. He approves of Hippocrates’ explanation, which attributed two brothers falling ill and recovering at the same time to their primary and secondary causes. However, he does not approve of Posidonius referring this to the similarity of the constellation. “The medical conjecture,” he says, “is much more acceptable. The parents were affected in their bodies, while they were lying together. The conception could have been affected so that, with the prior increments from the mother’s body, they would have been born with similar health. Then they were nourished in the same house with the same food. The air, the location, and the power of the waters determined whether the body received good or bad influences. Medicine attests that, having been accustomed to the same exercises, they carried similar bodies. Therefore, they would be moved by the same causes to fall ill at the same time. To refer this to the heavens or the stars, when they were conceived or born… I don’t know whose insolence that would be.”

Thus we have woven Augustine’s very words into our text. Many, understanding only this from him, have frequently used this idea, believing that Augustine thought the diversity

of all corporal effects came from the heavens. With Augustine agreeing, astrologers imagined they could prophesy about such matters. They forget that nothing is more justly said to be corporal than the temperament of the body itself. Those who seek the causes of this in the heavens are censured by Augustine under the title of insolence.

Chapter Thirteen

The Sun accomplishes many things that astrologers believe are done by other stars.

Turning the first argument of the astrologers back against them, we have explained, with a long but necessary digression, what the heavens do to us. We have also explained how the actions of the heavens vary, whether we consider the stars themselves or the matter that receives their influence. It is clear that the heavens are the universal cause, and that the distinction of effects, especially those that are principal and substantial, must be sought from them. Now, in due order, as we have made progress through the points, we shall address the second issue to be resolved.

Since the dispositions of lower bodies are observed to vary according to the different relations of the Sun and Moon, astrologers claim that the same belief should be held regarding other things and the planets. For, they say, the changes of the four seasons through the Sun's circuits, and the states of all bodies, are altered not only by succession of time but also according to the Moon's waxing and waning. What then? They think two conclusions should be drawn:

First, just as sea urchins, shells, the ocean, and the moistures of bodies change according to the courses of the Moon, and likewise the earthly mass shifts in response to the annual and daily revolutions of the Sun, so too other things are bound to the stars and governed by them.

Second, the evident power of the Sun and Moon in altering sublunary matter suggests the same about the rays of the other stars – that they too, although their influence is more hidden, possess great power to alter and affect.

Neither conclusion is evident, since even the very arguments of astrologers seem to support their opponents. Before proceeding, we will explain our observations based on established principles, making it clear from both arguments and experiments that we are not holding opinions about the efficacy of the stars and the influence of celestial forces other than those dictated by natural reason. I will not hesitate to expose the astrologers' fallacies and to point out their numerous errors in passing. Let us therefore begin with the works of the Sun.

The Sun's approach and retreat alter the seasons of the year; this we would swear by oath. But this very effect is caused by the obliquity of the zodiac, not by the nature of the signs. The Sun does not blaze in Leo because it is the sign of Leo, or the Sun's 'house,' or a 'hot' sign, as astrologers claim in their fables. Rather, the Sun, when positioned there, is closer to our atmosphere and has already been warming it for six months. Otherwise, the Sun would be hottest in Cancer, where – even according to astrologers – Cancer is not the Sun's 'house' or 'exaltation,' nor is it a fiery sign, but rather a watery one.

In Aries, the Sun renews the world, calling forth flowers and awakening seeds to growth, because as it returns to us, it inspires a fruitful and beneficial warmth in bodies. The astrologers' fable, however, is that Aries is the Sun's 'exaltation,' as if the same effect would not occur in Libra for other peoples, opposite to Aries. Similarly, when the Sun departs from us and approaches them. Therefore, the sole cause of all this variety is the Sun's greater or lesser distance from the lands we inhabit, whereby we partake of more or less of its heat.

From this, it follows that thunderstorms occur in spring because, when the Sun reaches Aries, the winter moisture in the air is dissolved by its warmth. This results in

evaporation being carried upwards into the atmosphere, forming the mass of clouds from which thunder and lightning arise.

If astrologers understand this, what intellectual sluggishness or desire to deceive compels them to define Aries as a sign that stirs up rains and thunderstorms, as if this were the result of Aries? Why would they not say the Moon also causes thunderstorms in Aries? They must observe that such phenomena occur not because of the influence of the signs themselves, but due to the Sun's action upon reaching that sign.

With similar deception, Ptolemy writes in the *Apotelesmata* that the Moon in Aries, if it causes disease, primarily causes vitiligo (which the Greeks call *alphos* and is commonly known as *morphea*); in Cancer, *mentagra* (which the Greeks call *lichenas* and is commonly known as *impetigo*); in Libra, leprosy; and in Capricorn, freckles.

This is actually derived from the conditions of the air when the Sun passes through those signs. This corresponds to the seasons: spring, when the Sun is in Aries; summer, when it is in Cancer; autumn, when it is in Libra; and winter, when it traverses Capricorn. The types of diseases align with the conditions of these seasons. In spring, vitiligo tends to invade and affect the outermost skin because of the abundance of humours prevalent at that time of year. In summer, *mentagra* arises from drier and sharper materials. In autumn, leprosy occurs, being thought to result from an infection of black bile. Freckles (lentigines) are associated with winter, originating from the predominance of colder and more humid residues.

It is the height of ignorance to attribute to the signs of the zodiac what is actually caused by the Sun, which heats the air more or less depending on the variation in its position. Or if the astrologers do understand this, they pretend they do not, supposing that other planets produce the same effects in the same signs.

Let us therefore conclude that the diversity in the seasons arises solely from the Sun. Specifically, its approach and retreat due to the obliquity of the zodiac.

If, however, not all summers are equally hot, nor all winters equally cold, this is due to the disposition of terrestrial matter. Such matter has the greatest influence on the atmosphere, as is demonstrated by both sensory experience and Ptolemy. It is unnecessary to attribute this to the heavens, except as a general cause of all physical things, as can be understood from Aristotle's *Meteorology*.

Thus, during the same summer, some days are hotter and others cooler, yet this variation is not caused by the Sun's position itself. Rather, it arises from lower-level changes, such as a wind being stirred up in some region, an outpouring of rain, or some other phenomenon of this kind. This might occur far from us, so we cannot see its cause, though we nonetheless feel the effects when its influence, along with its result, reaches our atmosphere.

Perhaps some planets are hotter than others, and those with less heat can, incidentally, generate rain by dissolving humours without consuming them, veiling the sky with clouds and thereby reducing heat and intensifying cold. Conversely, the hotter planets promote dryness and warmth. This is not inconsistent with our principles – namely, that the dominance of a particular star may influence atmospheric changes, provided this dominion stems from natural interactions. Not from any supposed influence planets or stars exert without illuminating or directly interacting with things on Earth.

However, since we suspect that whatever influence reaches us from the higher stars is exceedingly slight, especially regarding perceptible qualities, the causes of weather phenomena, if sought in the heavens, are often not found. This is whether we follow the astrologers' interpretations or the philosophers', as we have established.

These effects, which either diminish or enhance the role of the luminaries, should be attributed rather to material conditions. The luminaries themselves, one [the Sun] by its position alone, the other [the Moon] by its changing light, effect changes. Yet neither does so

according to the nature of the signs they pass through, the places they occupy, or the planets with which they align. This will be shown in the following discussion.

The Persian Gulf becomes rough and tempestuous when the Sun enters Virgo, and especially when it reaches Sagittarius, while it becomes calm and navigable when the Sun is in Pisces and especially in Gemini. This contrasts with the Indian Ocean, which is tranquil under Virgo and Sagittarius but navigable under Pisces and Gemini. This is not due to the qualities of the zodiac signs but rather to the position of the Sun and the condition of the material elements, as even astrologers admit.

Accordingly, the observation of seasonal patterns by sailors, based on the conditions of the sea during their voyages, can be useful and not superstitious. The days during which they advise against sailing, if these have any heavenly cause, must derive from the Sun rather than any other celestial influence. This is because such observations are fixed and unchanging, tied to the conditions of the Sun, whose behaviour in these periods is consistently the same. The other constellations and celestial bodies are never found in the same configurations at these times.

For example, sailors traditionally regard certain days as unfavourable: March 1st, 7th, 15th, 17th, 19th, and 25th; April 5th, 6th, 12th, and 20th; and February 6th, 12th, 15th, 17th, 19th, and 20th. They consistently follow this observation, and claim that during these days significant changes often occur in the sea, either towards calmness or towards storminess. Since outcomes are uncertain, they deem it safer to refrain from sailing on these days, lest sea-change lead to disaster.

This cannot be reduced to the positions of the stars, after the manner of astrologers' recommendations, since similar times of year do not always produce similar outcomes, but sometimes most dissimilar ones. The astrologer will sometimes declare certain days, which are considered suspicious by navigators, to be harmless and even most favourable for sailing.

Other days, not feared by sailors, the astrologer will pronounce as dangerous and perilous. This is because at any given time, the Sun and the planets present varying alignments that influence events differently.

The sailor, whose principles are fundamentally opposed to such doctrines, will not approve of astrological nonsense. The truth of the sailor's view is demonstrated through prolonged experience and the daily practice of seamanship. Such experience exposes the vanity of astrology and reveals the emptiness of its claims.

There are two causes for sea-weather: one the Sun, and the other the water. Just as our bodily humours experience times in which they are stirred-up, so the ocean has its own periods of upheaval, under the influence of the Sun. With solar approach and retreat, the disposition of the sea and all bodies is evidently altered.

It should be noted that this variation of times, as described by those who write about rural and nautical matters, is denoted by the rising and setting of the fixed stars. Arcturus, the Pleiades, the Hyades, and others. This is not because their influences are feared or sought after. Astrologers themselves, unless the cardinal points are involved, consider them ineffective. Rather, it is so that those unlearned in these arts may have a visible sign by which to distinguish the time, for there is no better method than observing the rising and setting of the stars. This method also serves to gain greater authority and observance from the uneducated masses.

Physicians write that winter illnesses are sometimes resolved in summer, summer illnesses in winter, those that arise in winter are relieved in spring, and those that begin in spring subside in autumn. Likewise, illnesses that occur at any time of the year may end in a different season. This is because the qualities of these seasons vary according to the Sun's proximity to or distance from the Earth.

As for what they say about the Moon and critical days in illnesses, that is baseless and irrational. However, we shall address this later when we discuss the Moon.

The varying influence of the Sun affects all things, both inanimate and living, under different celestial inclinations. This explains why not all lands yield the same fruits, why the customs and physical constitutions of peoples vary across regions, and why we should not attribute these phenomena to constellations, signs, or planets other than the Sun.

The Sun always moves between Cancer and Capricorn; thus, those living between the equatorial circle and the summer solstice circle necessarily inhabit the hottest region. Conversely, those situated in the North (Arctic) region, being farthest from the Sun, live in the coldest climate; those in between experience a temperate region.

Moreover, since the eastern part of the heavens is the rising side, the Sun's influence is stronger there than in the western part. From this, explanation can be derived for all matters, so far as celestial causes are concerned, regarding the peculiarities of different regions.

Gems, aromatics, and other such things, which require greater celestial heat, are produced in the East and South. Similarly, lions, tigers, elephants, and other animals that demand warmth to be generated, to live, and to remain vigorous, are found in those same regions.

Only humans are born and survive in every part of the world, due to the vast adaptability of their nature, which manifests in many forms. Given this diversity, the specific distinctions of humanity have given rise to suspicions among certain philosophers.

Thus, those who inhabit the southern regions, the more they breathe in the hotter air, the colder they are internally. For this reason, they are timid, effeminate, and – as both ancient and modern experience confirms – born to serve.

These effects occur because excessive heat loosens bodies to such an extent that it draws out and consumes much of their internal warmth. Consequently, this heat is drawn to the surface of the body, so that it abandons the internal depths. The result leaves behind darkness in the skin and timidity in the heart. On the other hand, those who live under a cold sky, towards the North, are spirited, brave, and fair-skinned due to the opposite cause.

However, both groups, whether they live under the intense heat of the Sun or far removed from it, possess little humanity and are not very sociable. This is because they deviate from the moderate temperament, which is most suited to our nature, due to excess of either heat or cold. Both groups are savage and uncivilised, partly for this common reason and partly because one is fierce, while the other is fearful.

The Greek astrologers fabricate. It is not because the harmful planets, Saturn and Mars, dominate in the extreme climates, that those peoples are more savage. Nor is it because Saturn dominates the southern regions, that the people there are timid and short-lived. Nor is it because Mars dominates the northern regions, that the people there are more warlike. This is a fable even astrologers themselves do not agree upon, as some do not assign Mars to the northern regions but the Moon instead.

Rejecting both Mars and the Moon, we instead offer a proper explanation – derived from the Sun – concerning the nature of each group. To imagine some other cause is more the work of a dreamer than a philosopher. They say Saturn also dominates in India, yet people there are long-lived. Why, then, should southern peoples be short-lived due to Saturn's excessive coldness? Why are they timid? The most ferocious beasts are born there, although Aristotle writes that all creatures are more vigorous in the north.

Human nature struggles greatly with extremes. Just as bodies are warmer in the belly during winter than in summer, so those under intense heat grow cold internally and are worn out by old age scarcely past their thirtieth year, as Avicenna recounts. Northerners, under a

frigid climate, burn inwardly in their vital organs due to retained heat and an abundance of thicker blood. Consequently, they are much stronger than southerners, while the latter, owing to the subtlety of their spirits and blood, become more ingenious.

The nations in the middle, neither deficient in blood nor dulled by its thickness, are more prudent and wise, and more suited for rulership. As I might say, they are more human.

This general variation in the inhabitants of the earth arises from the celestial circuit, and to this might be added many specific differences, arising from the sublunary disposition of the lands, air, and water. For instance, one region is either impassable due to marshes or half-withered by stagnant waters, or repeatedly besieged by murky nights of fog, while another is open to winds through its ruggedness, or elevated by mountains.

I have dithered on these matters longer than is proper. These things pass from the earth to the air, and the air itself has its own properties, differing from place to place, as Panaetius says. It is not a set of properties derived from the heavens but from its own principles. It is uncertain how these differences in the air affect bodies more or less.

The inhabitants modify these properties with their very breath, as is shown by the things they consume, which in turn are rendered harmful or healthy solely by the condition of water and air. Hence the first diversity in bodies arises from the celestial impression made by the Sun, which is immediately followed by another diversity stemming from diet.

But the diversity of mind and character depends both on the condition of the body and on education and habit, which closely approaches the forces of nature.

Laws too can added, as having the greatest influence in this matter. To such an extent they can render the most savage nations exceedingly gentle, if rightly applied. Conversely, they can easily weaken the strongest, and turn the best into the worst, if they are faulty. Hence, freedom of the will is most clearly demonstrated against any necessity of nature.

The Gauls were once infamous for their amorous love of boys, if we are to believe Ptolemy and Aristotle, but they now abhor such a crime, thanks to the benefit of Christian law and the most holy prince, King Louis. So much so that no nation under the heavens now detests it more.

Yet, it is not proper to rely on the example of a single people. Evangelical preaching has changed the morals and institutions of nearly the entire world.

The peculiar quality of a region can greatly contribute to the pursuit of arts and professions. One placed in a given location might devote himself to trade or navigation if they are in a city near the sea, to letters if near an academy, or to military service if the city is troubled by hostile neighbours or internal civil factions.

Some are made idle and pleasure-seeking by abundance and fertility, while scarcity and barrenness render others industrious, hardworking, and diligent.

Some astrologer might say: “We do not deny these things; we affirm and proclaim them along with you. But we assert that places have properties arising from their specific influences and peculiar constellations. These depend on the trigon, the planet, the sign to which the region is subject, the disposition of the heavens when the city foundations were laid, and when its empire, king, or tyrant arose or took power. Therefore, although what you say may be true, it does not follow that our statements cannot also be true.”

From what I have mentioned, most excellent diviners, it should not be concluded that what you imagine cannot exist. Rather, we should understand clearly, that the variation in places and peoples can be explained without the need to seek other causes. The causes that you, astrologers, have introduced will be shown to be false and fanciful by what follows.

In our discussion of the diversity of peoples and regions, one might ask what is the cause of such great variety. Before we overturn the false conclusions, it has proven necessary to demonstrate the true causes. Thus it might be understood that yours are unnecessary, and

will later be refuted as fabricated and impossible. We did not introduce the vivifying heat of the heavens, which we have discussed above, nor the power of the Sun, merely in order to overthrow your argument. Nor for this reason did we mention the rays of the stars being intensified or reflected due to their distance or proximity to us.

Before I refute your fabricated nonsense, and show how absurdly you invent changes based on places, signs, and the aspects of stellar power, I desire to do something else. Appealing to the authority of philosophers, the testimony of the senses, and the judgement of reason, I would make it known that, whatever the heavens accomplish in us, all of it is possible, and indeed most sufficiently so, through the power of healthy and warm light, as it emanates continuously from the perpetually moving body. To invent other powers, or stellar influences on bodies, is superfluous. It will be easily shown that what you have invented is not only superfluous but insane.

Chapter Fourteen

How the power of the Moon varies. That certain days of the Moon are observed by vain superstition.

We have shown that the doctrines of astrologers do not follow from what we observe of the Sun. Now we shall show the same regarding the Moon. Ptolemy's *Apotelesmata*, says the Moon is more effective in producing moisture from the new moon until its first quarter; from there until fullness, in producing heat; from fullness to its last quarter, dryness; and from there until the new moon again, cold. Thus, in its first quarter, it has the nature of spring and air; in the second, of summer and fire; in the third, of autumn and earth; and in the fourth, of winter and water. At those times, the Moon most strongly excites the appropriate seasonal qualities in bodies.

This division seems appealing, but contains little that is natural or true. The nature of heat is such that, when weak, it does not move moisture, as it can barely be felt. When it has some efficacy, it begins to dissolve moisture, and dissolves more extensively the stronger it is, unless it becomes so powerful that it consumes the moisture it causes to flow. Then it dries, not moistens. But the heat of the Moon, being very faint, is never so intense as to dry. Rather it moistens bodies with heat, not dries them. Hence, as the Moon waxes, the more moisture it produces, as well as more heat. Conversely, as it wanes, it both moistens and heats less.

Thus, the Moon would more fittingly follow the nature and quality of spring from the first quarter to the full moon, rather than from the new moon to that first quarter, since the nature of spring is defined as moist. Nor can it represent winter from the second quarter to the new moon, or autumn from the full moon to that quarter, since autumn is dry and winter is moist.

The Moon moistens from full to half-full; and from then until the new moon, it dries, as its moistening effect ceases. For this reason, durable wood is also cut during that time. Ptolemy himself, much more rightly, says in the *Centiloquium* that from the first quarter of the Moon, when it has moved away from its conjunction with the Sun, the moisture of bodies flows until the second quarter. In the remaining times, they diminish.

Indeed, this is also confirmed by experiments. As the Moon waxes, there is an increase in moisture, and as it wanes, a decrease. This is due not only to the quality of its light but also to its motion, which operates towards growth or decline. From when it leaves the Sun until it is half-illuminated, the Moon moistens and heats more than when it holds the same amount of light in its second dichotomy, heading towards conjunction. In the former case, the light is increasing, and in the latter, it is decreasing.

This is the entirety of lunar astrology, as usefully and naturally observed by physicians, farmers, and sailors. In general, they consider the time of the waxing Moon advantageous for planting, because the seeds, nourished by abundant moisture, grow more quickly. Conversely, they deem the waning Moon suitable for cutting timber, since all material is drier and thinner at that time. It does not rot as easily or succumb to decay.

On the other hand, if something is taken when the Moon is bright, moisture is then abundant, so it easily rots and deteriorates. Hesiod rightly praises the ninth day of the Moon for planting trees, as well as the thirteenth, since, as Plutarch says, the implanted force, fuller now with light, is spread to the roots. However, this same time is unsuitable for sowing seeds. The sown seed desires rain, so that it may decay and germinate.

Furthermore, Hesiod suggests the sixteenth day is unsuitable for planting because the waning light does not sufficiently encourage growth. Therefore, when Virgil says "the seventh after the tenth is fortunate for planting vines," this cannot be understood as signifying the seventeenth day. This day is least fortunate for planting vines, because the light is diminished.

Either Virgil refers to the first seventh, which is after the better tenth, that is, the fourteenth – on which, with the full moon, vines are not unhappily planted. Or more likely, Virgil praises two days: the seventh (he says "the seventh is fortunate"). On the seventh day, the half-moon provides sufficient heat and moisture, and so does the tenth day.

By no means could Virgil indicate the seventeenth day, except ignorantly and falsely. It is not suitable for planting trees but rather more fitting for cutting them down, as Hesiod also records, for the reason we have mentioned – the decrease of moisture. Therefore, at that time, timber is prepared for building ships, which must endure for a longer period.

The Greek poet [Hesiod] also instructs that crops be brought into the threshing floor at that time. The reasoning, as Proclus writes, is that winds tend to arise after the full moon, which separate the chaff and husks from the grain itself.

Just as the purpose of these days, and the prescribed actions, are easily understood, so too are other days suitable for certain tasks, in accordance with the Moon. Sometimes their rationale is not as apparent. Nevertheless, they arise from the same natural principles. A specific portion of the Moon's light might harmonise with some activity in an appropriate proportion, while being discordant with another.

Perhaps this is the case with those recommendations of Hesiod: that lambs should be castrated on the sixth day of the Moon, oxen and pigs on the eighth, and mules on the twelfth. Likewise, the sixth and sixteenth days are considered more suitable for producing males than females, while the tenth day is better for females.

However, Hesiod recommends castrating calves in autumn, when the Moon is waning, for a clear reason: the risk of fluid leakage in castrated animals. Hence, a dry season and a waning Moon are preferred. For the same reason, it is also advised to avoid giving the castrated animals much to drink.

Hesiod considers the sixth and sixteenth days of the Moon more suitable for generating males than females, and the fourteenth better for females, because, as we have often repeated, moisture increases with light. During the full moon, the humours of generation will flow more abundantly, leading to offspring more likely female than male.

In this way, other teachings of Hesiod can be traced back to natural causes – although he mixes in old superstitions, these are very few, and none supports astrologers. Likewise, sailors prudently observe the phases of the Moon's borrowed light without superstition, as these variations in light significantly alter the condition of the air. They wisely refrain from sailing during the new Moon and full Moon, as storms often arise during these times.

Physicians, too, make sound decisions when observing the days of the Moon's waxing, lest the greater abundance of humours flowing through the patient's body escape their notice. This is especially important in a diseased body, which, deprived of its natural defences, is more vulnerable to external harm.

For example, cutting a vein during the waxing phase of the Moon, and cupping during the waning, may have some rationale. Vein-cutting expels, while cupping draws inward; thus, with humours boiling and pushed to the body's extremities at the start of the month, perhaps more material than necessary might be drawn out. Unless one argues that artifice (i.e., medical procedures) are always more effective when they align with the course of nature. But let these matters be left to the judgement of physicians.

Whatever else the astrologers observe beyond this is mere vanity, as will become evident in what follows.

Chapter Fifteen

The tides of the sea can be attributed to a cause other than the Moon. Insofar as the Moon causes the tides, it does not support astrology.

There is a complex question regarding the ebb and flow of the sea, as it seems that this occurs because of the Moon.

However, Adelard, following the opinion of the Saracens, narrates and proves another cause for the rise and fall of the sea: "For when," he says, "the arms of the sea, that is, the bodies of water which are separated by the mass of land, rush to meet each other with a swift impulse, there are then obstacles. Intervening mountains, and the positioning of the land. The waters are reflected from the same course when they recede, and from the position of the land they are drawn back, as though by the natural and paternal force.

However, the Moon is not the cause. Otherwise, this same phenomenon would occur in the seas nearer to the torrid zone, since they are no more distant from the Moon, and do not feel its power any differently, nor is the humid nature of the waves thought to be less. And yet there is no reciprocity. The cause we mentioned – of the parts meeting – is absent, due to the mass and position of the dry land."

This is Adelard's opinion, not greatly differing from the likeness of the truth. We see parts of the ocean separated by intervening lands, but nevertheless eager to meet. The seas strike the shores as they approach. Then they retreat amid the impact of the obstruction. When this cause is removed, as happens in the southern sea, we see these tides do not appear.

One might say that this movement of approaching and retreating is natural to water. Not insofar as it is water, but insofar as it has the parts of the primary element, separated and divided by the obstruction of the terrestrial mass.

If this reasoning does not satisfy, let us hear another argument.

Astrologers confess that such recurrences do not occur in all waters, even marine ones. They only occur in situations where the land is deep, hard, rough, and uneven with frequent mountains. Where the water is abundant, neither increasing with the addition of rivers, nor decreasing with their departure, but enduring due to the water's significant depth. The sea then becomes a reservoir and a nurturer of many vapours, neither thin nor easily dissipated. These draw their distinctive bitterness and salinity from their origins: the earthy water, the watery earth, and the heat of the heavens.

Since springs, rivers, and even certain seas do not possess these conditions, it is said tidal phenomena do not appear in them.

The sea's reciprocation may be understood, given that from this earth and water, vapours and winds are repeatedly stirred up. Winds and commotion arise in the water, and

through this agitation and the admixture of vapours, the water heats up, seeking a larger space in which to spread itself.

In addition, as if a third cause of motion, the reflection of winds strikes the water-surface and presses it downwards. These winds, entangled with those blowing from below, drive the waters upwards. Consequently, the waters erupt, overflow and swell; at the same time, repelled and struck back, they create their own motion of return.

This force dissipates as the vapours dissolve, and the waters subside and settle, drawing back and retreating. The generation of such vapours and winds, depending on the nature of the sea, appears almost perpetual, as does their dissolution – a sufficient cause for constant reciprocation, whence cold waters return after first arriving warm.

This is what Adelard indicates. And indeed, those defending this opinion can provide a rationale as to why certain larger seas do not exhibit reciprocation, even though winds and vapours are present. The same effect occurs, but the vastness of the open sea and the remoteness of the shores obscure the ebb and flow. What is observed therefore seems a fluctuating surge, rather than a true reciprocation.

If these explanations align with natural reason and correspond to empirical evidence, why should they be deemed insufficiently credible? Why add the Moon's motion as a cause, supposedly drawing the waters downwards and upwards? Especially when the expected correlations fail to manifest, such as when the Moon is fuller in light, swifter in course, closer to the Earth, more inclined to the north, or positioned in northern constellations, and yet greater tides do not reliably occur?

The more subtle phenomena similarly present themselves differently. It does not seem any significant objection can be raised against those holding Adelard's view, except for the apparent harmony between the movement of the waters, both in rising and falling, and the phases of the Moon. But if what Aboasar says is true, this harmony is questionable.

He writes that the beginnings of tides and ebbs are not the same everywhere, even where there is no variation in boundaries. Indeed, it sometimes happens that the waters recede in one location and simultaneously rise in another. Thus Aboasar provides ample reason for suspecting that these movements are not dependent on the Moon's motions.

Although he attempts to account for this diversity in order to argue that the Moon is nonetheless the cause, it follows that no argument can be drawn in favour of the Moon from this. Rather one finds an opportunity for contradiction. And these things differ greatly among themselves: for while the timing of the tides clearly aligns with a lunar cause, Adelard's theory is not clearly refuted by these variations.

Alpetragius proposes a celestial cause for tidal movement. One not stemming from the Moon, but from the diurnal motion by which all things are moved, though lesser things are moved to a lesser degree. His theory is that the sphere of fire rotates uniformly, producing disorderly motion in the air, which in turn manifests in the water as ebb and flow.

All this, I discuss more as a philosopher seeking the true cause of the tidal effect than as one contradicting astrologers. Nothing in this debate advances or diminishes astrological claims, whether we attribute these tides and ebbs to the movements of the stars or to the Moon itself.

This very thing, as Favorinus very truly says, is more the deception of astrologers. They have seen certain earthly things among men, situated as they are, moved by the influence and guidance of celestial bodies. The ocean, for example, as if were a companion of the Moon, grows old and young together with it. From this, astrologers argue that all things in human affairs, both small and great, are as if bound, led, and governed by stars and constellations. Such things may indeed be governed by the Moon, which we ourselves willingly and easily believe. But why should this argue for the astrologers or against us?

Nor is it as some think, that the stars act, not only by motion and light but also by hidden influences – when the Moon, beneath the depths of the Earth, moves waters that its light cannot reach. Roger Bacon, in a letter to Pope Clement IV, wished to explain the cause from moonlight in this manner.

He argues that when the Moon rises above the sea of some region, the lunar rays fall at oblique angles. They are then weaker and stir up vapours from the depths of the sea, which they cannot consume. Vapours, I say, engorging the waters, just as fire placed beneath stewing pots evaporates water, causing the edges of the pots to froth over. While this attraction of boiling vapours lasts, the seawater flows. When the Moon approaches mid-heaven, the lunar rays become more direct, since they are straighter and therefore stronger.

So Roger signifies to us.

However, he raises hereafter the proposed question. Evidently, the Moon retains its power while tending from the west to the lowest part of the Earth. The waters rise equally as when the Moon ascends from the east to mid-heaven. But he admits the lunar rays cannot penetrate the middle of the Earth. This Roger explains thus: the highest heaven, whether the eighth or the ninth, is necessarily dense. It terminates sight, which is terminated only by something dense. Therefore, the lunar rays extended to that place must be reflected.

Therefore, as the Moon moves from the west to the lowest part of the Earth, its power exerts influence in the opposite quarter of the sky. With the ray reflected, it performs what it did when proceeding from the east to mid-heaven.

This is Bacon's invention. He is so pleased with himself, he boasts of reasoning out the movements of approach and withdrawal into opposite quarters. But there are as many shameful errors in his statements as there are words.

Firstly he fails, not by experimental observation, but through reliance on Aboasar, whom Bacon misinterprets. Aboasar asserts that the Moon's effect increases as the Moon

reaches mid-heaven, and that it does not abate until it has begun to descend. Bacon meanwhile thinks the effect abates the more the Moon approaches mid-heaven, as the vapours are dissolved by the hotter light.

Nor does Aboasar imagine the light of the Moon to be so focused that it stirs up sea exhalations, much less that it consumes them. Nor does he suggest the Moon raises exhalations great enough for the tides to move. But if Bacon denies this more stubbornly, he must admit this: for several days around the new moon, there can be no ocean tides under his theory. At that time there is no light of the Moon, or at least so faint a light that it cannot generate vapours in the sea or dissolve them.

Why are the rays of the descending Moon not stronger than those of the ascending Moon? Why does the descending Moon withdraw the waters, while the ascending Moon brings them rushing in? Why are the lunar rays not weaker when the Moon declines from mid-heaven than when it first rises? Why does the Moon cause a withdrawal in one place and an incoming tide in another? As Bacon himself perceives, the vigour of the rays, with greater heat, represses the tide while their weakness increases it.

Finally, who would believe that the reflected rays of the Moon – while it runs beneath the Earth – possess a sufficient force to consume the stirred-up vapours? Or, if they cannot do this, what is the cause of the withdrawing tide? When the Moon has descended beneath the horizon, according to Bacon's theory, why do the waters recede as the Moon descends? Why do they then rise as it ascends?

Let Bacon keep his nonsense inventions to himself.

If such an effect indeed pertains to the Moon, let us ascribe it to that motion of the Moon which the ocean imitates in silent agreement with nature. The sea rises with the rising Moon and falls with the setting Moon. This solution seems to have pleased St Thomas Aquinas in his book *On the Hidden Works of Nature.*

Nor are these tides an increase or decrease in the quantity of waters, but, as the very words themselves express, a flowing and ebbing. Not an increase or decrease, but an extending of the sea by its rising, and a contraction by its falling.

We now discuss the differing tides across days.

As writers have recorded, if certain seas experience an in-rush of water when the Moon's light is increasing – that is, from new moon to full moon – and a receding of water when the Moon diminishes – from full moon to new moon – these seas do not follow the Moon's motion. Rather, they follow the light of the Moon, as it waxes and wanes.

Variation in moonlight can also slightly alter the daily tides. But traditional observations do not agree on this point.

Both the Egyptians and those who sail westwards claim the tide increases from noon on the first day of the lunar month up to the eleventh day, and decreases from the eleventh to the twelfth day and eighth hour, and part of the next day. Up to the twenty-sixth day, it increases again and then gradually decreases until the beginning of the month. When the influx of water is greater, the outflow is less, and the opposite in reverse proportion.

Others say this truth is observed in the waters of rivers flowing down from springs. On the mentioned days, the rivers expand or contract. However, concerning the sea, it is reported differently by the easterners, who do not even agree among themselves.

There are those who report that the tide diminishes in the first and last ten-day periods of the month, and grows in the middle. It seems to have this reason: the tides grow with fuller light and diminish with dimmer light. Others say the tidal change is not continuous for many days. The tides increase or diminish, but this happens on one or the other day.

Aboasar establishes four phases: the first after the new moon, when the Moon begins to wax, until it is half-full. The tides diminish proportionally to the Moon's movement away from the Sun, so when the Moon comes to its quarter phase, the tides are weakest.

The second phase runs from there until the full Moon. During this time the tides gradually increase, so they reach their highest point with the full Moon.

The third phase runs from the full Moon to the half-full moon, with the tides decreasing along with the light.

The fourth phase runs from there to the new moon. The tides become continually stronger, so during the new moon, they are again at their peak.

But this theory of phases can have no rational explanation, since difference in light, abundant or scarce, increasing or decreasing, renders the observations inconsistent.

If an increase in tides is associated with abundant and increasing light, Aboasar's fourth phase is disproven. If with scarce and decreasing light, the second. If with abundant but decreasing light, the third. If with scarce but increasing light, the first is disproven.

In any case, whichever of these traditions is deemed most acceptable, it is clear nothing compels us to invent a new power in the Moon, beyond its motion and light.

The stirring of the sea, and the diversities in the tides, most evidently have their cause either in the motion of the ascending or descending Moon, or from the waning and waxing of its light.

Chapter Sixteen

The opinion of Galen regarding the critical days, which he attributes to the Moon, is refuted.

The crises, which you would call 'judgemental' days in Latin, I do not doubt are falsely and superstitiously attributed to the Moon; this must be explained more fully.

Galen, the proponent of this opinion among physicians, mentions a twofold lunar influence in the third book of *On Critical Days*. One influence comes from the Sun, from

which the Moon receives its light; the other from the signs of the zodiac, through which the Moon passes each month with its own motion. Then, based on the opinion of astrologers and alleged experience, Galen posits that great disturbances are caused by the Moon's oppositions and quadratures. He claims this is true in relation to the Moon's position, both with respect to the Sun, and also to the signs without any consideration of the Sun's influence.

In relation to the Sun, when the Moon is half-full (which occurs in quadrature positions relative to the new moon) and again when it is full (which occurs when the Moon is in opposition to the Sun), it changes the state of the air and the weather.

In relation to the signs, whatever begins when the Moon is positioned, for example, in Taurus, undergoes a change when the Moon subsequently reaches Leo, Scorpio, or Aquarius, which are the signs square or opposed to Taurus. Galen confirms this with the authority of the Egyptians, who assert that if, in someone's nativity, the sign Aries – used here as an example – has favourable stars, the person will fare well whenever the Moon passes through Taurus or the signs in square or opposition to it. Conversely, they will fare poorly if the stars are unfavourable.

From this, Galen believes the cause of critical days becomes most evident. The seventh and fourteenth days are especially critical. On the seventh day, the Moon reaches the fourth sign from where it was positioned at the onset of the illness, and on the fourteenth day, it reaches the opposite sign. Since the Moon completes its cycle in twenty-seven days and approximately a third of a day, when it reaches these locations – namely the squares and oppositions – it stirs disturbances. This causes, on these two days (the seventh and fourteenth), the turmoil of illnesses, either leading to recovery, in the case of a favourable progression, or to death, in the case of a harmful one.

As for why Galen thought the twentieth day was critical, rather than the twenty-first, as Archigenes believed, he goes to some lengths to explain how the twentieth day could also be considered the seventh.

He first demonstrates this by an argument neither absurd nor difficult. The course of the Moon is completed in twenty-seven days, plus additional hours. Dividing this into four weeks, each week will consist of six days and twenty hours. Therefore, three weeks will account for twenty days and twelve hours. Thus, the twenty-first day, that is, the third day of the week, partly overlaps with the lunar cycle's twenty-first day. Its first twelve hours will conclude the twentieth day, and the remaining hours will begin the twenty-first.

And thus, the critical upheaval will occur on the twentieth day, as the Moon reaches the second quadrature, that is, during the third week. The same reasoning cannot be avoided if it is deferred to the natural twenty-first day, which typically occurs in acute illnesses, just as the twentieth tends to occur in prolonged ailments. The days progress in even numbers for the latter and odd numbers for the former.

After Galen states this (Pietro d'Abano later claimed it as his own discovery), he devises a new argument. He seeks not to agree with Archigenes, who attributed critical influence to both days, but to conclude that only the twentieth day is critical, while the twenty-first is not.

He reasons as follows: the time it takes for the Moon to return to conjunction with the Sun is twenty-nine days and twelve hours, commonly regarded as a month. Subtract the days during which the Moon is not visible, being obscured by the Sun's rays, since during that time it has no power to affect the lower regions. The remainder will be twenty-six days and twelve hours. The Moon is hidden for almost three days.

If we add those days – the period of the Moon's illumination – to the days it takes to traverse the zodiac, which Galen calculates as twenty-four days and twenty hours, the total will be fifty-three days and several hours.

Half of this total is twenty-six days and twenty-two hours. Galen reasons that this interval, a measure not without logic, could be applied to determining the critical days. He observes that when the Moon travels through the zodiac, only half the days are days when it is illuminated by the Sun. The lunar influence is doubled during this period – once from the signs it traverses, and once from the Sun's illumination. It is plausible that each of these influences could cause upheavals in illnesses.

This number was later called by posterity, based on Galen's authority, the *medical month*, just as the one consisting of twenty-nine days is called the *month of conjunction*, the one of twenty-six days and twelve hours the *month of visible manifestation*, and the one of twenty-seven days and a third of a day the *month of traversal*. From this concept, Galen achieved what he sought against Archigenes. If the entire month consists of twenty-six days and twenty-two hours, each week of this month will consist of six days, seventeen and a half hours. Therefore, half the month will be thirteen days and eleven hours.

The first hour of the seventh natural day, up to the seventeenth hour, will also belong to the seventh day of the medical month, and therefore they will be deemed critical. The remainder of that day will belong to the eighth day of the medical month.

The fourteenth natural day will contain only its first eleven hours from the fourteenth day of the medical month, while the preceding thirteen hours will be accounted with the thirteenth natural day.

As for the third week of the medical month – since each week consists of six days, seventeen hours, and a half-hour – it is evident that it ends on the twentieth natural day, with only four and a half hours remaining, which are attributed to the twenty-first day.

Galen's initial intent, and the very purpose of this entire construct, was to determine that the twentieth day, far more than the twenty-first, should be considered critical according to the weekly and sequential rationale. But Galen took upon himself unnecessary effort; indeed, it was not required. The critical nature of the twentieth day was already sufficiently defended by the delay in the Moon's traversal of the zodiac. He himself does not deny that the twenty-first day is also critical, and often more so in acute illnesses.

However, we do not recount these matters to adjudicate between Archigenes and Galen, as it exceeds our prescribed purpose. We shall demonstrate that, regardless of whether its power comes from the Sun or the constellations, critical days cannot be related to the Moon. We merely wish to prevent anyone from thinking that a satisfactory explanation had not been given, simply because Galen introduced a sort of mixed influence that allegedly determined critical days.

Perhaps Galen did not propose this. If he did, he could not have done so rationally. If the Moon stirs disturbances, when it is in the square or opposite position to some primary sign, and again when it is illuminated by the Sun's rays in square or opposite positions, we cannot expect such effects from the Moon, except during those times when it is in one of those configurations. If, that is, the causes of these effects are attributed to those positions.

Let us suppose at both times, such effects arise according to the condition and configuration of the Moon. And the influence of both configurations is mixed during the time when neither of those configurations is present, since this is the midpoint of the combined durations. Then we must admit ignorance of our existence. Indeed, we would no longer even be Orestes.

If Galen claims power exists in the weeks of his so-called medicinal month and its midpoint, but not in the weeks or midpoint of the month during which the Moon is illuminated by the Sun, or traverses the zodiac signs, he leads us astray. The influence of this

contrived month cannot be reduced to astrological forces – that is, neither to the square or opposite signs, nor to the square or opposite configurations of the Moon with the Sun. Claiming the powers of these configurations persist, or are conflated, during a time when such configurations do not exist is absurd and contrived.

Nor have those who sought to defend Galen and align the critical days with the Moon's courses been able to uphold their claims. At times, they argue one point; at other times, another. Never both simultaneously.

One might ask why the fourteenth day is considered critical. Those who base this claim on the Moon's course and its monthly journey argue that the Moon reaches the opposite signs on that day. This reasoning aligns only partially with the so-called 'medicinal month,' since the second week of that month ends on the thirteenth natural day. This leaves only eleven hours of influence that extend into the fourteenth day.

As we have said, each week of Galen's month consists of six days and ten and a half hours. Therefore, the thirteenth day should be considered more critical than the fourteenth, since it possesses thirteen critical hours compared to only eleven on the fourteenth. Thus, abandoning the supposed influence of Galen's fabricated 'medicinal month,' such people instead rely on the Moon's traversal of the zodiacal spaces.

On the other hand, to make the twenty-first day critical, they rely on Galen's month rather than on the Moon's actual traversal. But if a patient falls ill the day before the Moon's conjunction with the Sun, that is the new moon, and has their seventh critical day fall as calculated, how can this be attributed to either the Sun's power (transmitted to the Moon) or the zodiacal signs? For most of those days, as Galen himself states, the Moon neither appears nor affects us through solar power. It is therefore necessary for astrological believers to turn once again to the signs, attributing the critical nature of the seventh day solely to the influence of a square aspect.

I omit that Galen's so-called medicinal month is entirely artificial, a coin unstamped by nature. It is calculated as if the Moon were always hidden by the Sun for three days, whereas it is sometimes visible in the morning before sunrise and, on the evening of that same day, in the form of a thin crescent. This is confirmed by both experience and the testimony of Alfraganus.

Furthermore, Galen defines the duration of the Moon's movement as if it always proceeds at a constant speed. He does not account for the times when it moves faster or slower, a phenomenon demonstrated in astronomical calculations.

Let Galen, then, have his peculiar month to himself. To save him from frantic insistence, we may concede the critical days he prefers, without rejecting Archigenes.

I firmly assert that these critical days are governed by no course of the Moon, whether we consider the influence it receives from the Sun or from the signs. The influence from the Sun, as we have demonstrated, is solid and natural, yet critical days cannot pertain to it. Otherwise, diseases would always begin at the full Moon. Neither could the seventh day align with the half Moon, nor the fourteenth with the full Moon, during which times the quadrangular and opposing configurations of the Sun supposedly stir the humours.

This leaves the influence from the signs. However, as will be shown, such influence does not exist, and even if it did, it would in no way pertain to the critical days, as the astrologers' own claims reveal.

For if astrologers argue from experience, they claim disturbance arises on the seventh day and again on the fourteenth. During these days the Moon is supposedly in square or opposing signs. Thus, they claim these disturbances result from the change of signs.

We, however, argue the opposite. Disturbance arises on the seventh day and again on the fourteenth, yet during these days the Moon is often neither in square positions nor in opposing ones. Therefore, disturbances are not caused by any change of signs.

Which side aligns more with the truth is clear to anyone familiar with lunar motions. When the Moon moves swiftly through the lower regions of its epicycle, it reaches square signs by the sixth day. Sometimes it reaches opposing signs by the thirteenth. When it traverses the upper regions more slowly, it does not reach a quadrangular position until the eighth or ninth day.

Astrologers may respond that, for this reason, those days sometimes become critical. They might have a point if, when the Moon's course is slow, the humours are disturbed on the eighth or ninth day, on the sixth when it is swift, and on the seventh when its speed is moderate.

However, observation does not teach this. It often happens in practice that when the Moon is slower, crises sometimes occur on the seventh day, and occasionally even on the sixth. Sometimes with a swifter Moon, disturbances are delayed to the eighth or ninth day. Noticing this, many physicians firmly deny that this progress of diseases, as observed in nature, depends on lunar courses. Those who report otherwise are influenced by love for astrological matters or else by Galen's authority, whose weight in this matter we shall soon discuss.

Some modern writers falsely claim Avicenna and Hippocrates held this opinion. Hippocrates, however, never explicitly mentions the subject, but rather relies on readily observed numbers in nature, as noted by Celsus and Asclepiades. Avicenna recalls the opinion that relate these matters to the Moon, but remarks there is much ambiguity in such claims. He then dismisses the question, stating that its investigation does not concern the physician and might even hinder their work.

Let the authority of Galen prevail in determining which days are critical and how the sick person should be treated, whether they appear ill or their illness is anticipated. This is the

physician's duty, and so far as that profession is concerned, we agree with scholars in approving and admiring the work of the outstanding and truly divine Galen.

But when the cause of critical days is investigated – a matter for higher philosophy – the opinion of Galen holds neither as a matter of prejudice nor as a source of greater testimony. As Moses Aegyptius [Maimonides] and Avicenna, great men and supporters of Galen in medicine, state, he adhered more to the branches of other sciences than to their roots. Indeed, Galen is ridiculed by dialecticians for his fourth figure of syllogisms, and he is often confounded in philosophy, not perceiving the most clear validity. Philosophical judgement in him is lacking according to many.

Galen cannot understand how, with the soul still surviving and immortal, it ceases its function, even though the brain remains intact. A certain Platonist declares himself wearied by this question, as if, with the ship destroyed, the surviving sailor would not cease navigating. Nor does Galen understand what philosophers demonstrate: that universal concepts are understood only by human intellect, and not by the intelligence of brute animals.

Why he hesitates regarding the understanding of time is not something to recount at this moment. Nor indeed is our discussion really about Galen's philosophy; we have only lightly touched upon these matters to confirm the judgement of Maimonides and Avicenna. We thus avoid his authority being used as a tool for superstition. We are discussing astrology, and the calculation of the lunar motion demonstrates Galen has little skill here. Pietro d'Abano only defends him by saying that, in Galen's time, the nature of celestial motions had not yet been fully investigated.

In the field of medicine, let there be as much faith in Galen as there can be. As for his other teachings, we must tread more cautiously, and carefully examine what he has handed down, considering whether it aligns with experience, reason, or the opinions of others. His writings about critical days agree little with the facts themselves, as becomes evident under

examination. They do not even have the appearance of reason. For what reason would the Moon, when it reaches the fourth or seventh sign from where it was at the onset of the illness, stir up agitation in the humours? Galen provides no reason but appeals to the authority of the Egyptians. Recall his sixth book on simple medicines, in which he calls the Egyptians deluded, and promises to undermine their authority in the last two books. Let us now say this: the changes in bodies arising from lunar movements could not have been faithfully observed by the Egyptians. The Egyptians did not properly observe lunar movements.

Indeed, Hipparchus observed them more accurately on the island of Rhodes, although he did not attain the accuracy Ptolemy afterwards achieved. Ptolemy himself did not fulfil the desires of the Spanish astronomers.

Modern writers have devised an explanation, not only inconsistent with the truth but also with the position they supposedly uphold. Neither does it align with Galen's statements.

It is as follows: square or opposite signs have contrary qualities. Square signs possess either both qualities, or at least the active ones. For instance, Aries differs from Cancer in both qualities, since Aries is a hot and dry sign, while Cancer is moist and cold. Taurus, however, does not differ from Leo in both qualities; for they agree in dryness but differ in the active quality, with Taurus cold and Leo hot.

Similarly, opposing signs always differ in at least one quality. Astrologers proclaim that quadrangular and diametrical rays are contrary and conflicting. With these premises set forth, they conclude as follows: when the Moon reaches locations hostile to those it occupied when the disease began, a conflict arises between the disease and nature. But we, having accepted their premises, shall address them thus:

"Why do you think the Moon creates critical days? If it was in Taurus, for example, when the disease took hold… when the Moon reaches the opposite place, must it then

produce the opposite effect? Will it cause nature to fight against the disease, whence a conflict arises and a judgement grants victory to one side or the other?

The Moon will be in the opposite place when it reaches Leo or Scorpio. It will come to Leo on the seventh day, and to Scorpio on the fourteenth. Therefore, during these days, the Moon will sound the trumpet of war, as disease and nature clash upon the battlefield. But why does this not happen on the third day, when the Moon comes to Gemini, which differs more from Taurus and Leo? Why not on the twelfth or thirteenth day, when it comes to Libra, which Taurus agrees with less than with Scorpio? Why not on the fifteenth day, when the Moon enters Sagittarius, which differs from Taurus just as Scorpio and Leo do?"

I know the astrologers will reply that there is no connection of aspects among these signs. But I was not arguing that this theory of aspects is baseless (we will address it in the sixth book). Rather, I was showing that, even if there is some aspect connection, it does not serve the proposed question. Such connection is observed between two planets arranged at intervals: hexagonal, trine, square, or diametric. But here we do not configure the Moon with other planets. Rather, we only observe the Moon positioned opposite the place it had previously occupied.

Astrologers will deny that a star placed in Gemini is connected by aspect with stars placed in Taurus. They will not deny that this position is opposite to it. But if the Moon produces a contrary effect because it arrives at a place of opposite quality, why, if it caused illness in a cold and dry sign, does it not stir nature against the illness when in hot and wet signs? Whether that is calculated as the sixth sign, or the second, or another number.

This is entirely ridiculous. Nor could this be said by a man looking more to truth than to defending a position. But if they argue force resides in these aspects, they must consequently concede that when the Moon comes to the square signs, it will strengthen the illness, because just as square signs conflict, so trine signs agree.

If square signs of an opposite quality rouse nature against the sign of illness, will trine signs not cause illness by the same reasoning? Since the Moon almost arrives on the eleventh day, the eleventh must be considered harmful, even though it is counted by doctors among the beneficial critical days.

Anyone considering the observations of critical days as handed down by doctors can see these days have no basis in the Moon's motion. The doctors say bad disturbances happen on these days: the sixth, eighth, tenth, twelfth, sixteenth, and eighteenth. Let the astrologers explain these days through the Moon, if they can.

More often, it would be appropriate for the sixth and eighth to be good, with the Moon arriving at square signs on these days. But why are the tenth or twelfth entirely bad, when the Moon does not occupy places connected by aspect with illness? Why are the seventeenth and thirtieth days counted among the beneficial ones?

But concerning the Moon, why does every fourth day have power below the twentieth, while beyond the twentieth, it is sevens, not fours? When you have passed the twenty-seventh, the thirty-fourth, and the forty-first, a critical day of the twentieth cycle is found in the sixtieth and eightieth, then the hundred and twentieth.

Just as these things do not have a cause from the Moon, so too they cannot have one from the Sun, nor from any constellation whatsoever. Those constellations are not found stationary on fixed days, nor are they found similar or in agreement. But they vary in a strange manner, nor do they follow any order that could correspond to the natural disturbances of illnesses.

One may marvel at Pietro d'Abano who associates the sixth day with malice – Galen compares it to a tyrant – just as he compares the seventh to a king, on the basis that the Moon, by its swifter course, comes to a square aspect. The seventh day becomes beneficial because of the nature of the square, which, of course, would oppose the sign of illness.

How then does d'Abano argue the malice of the sixth day from the square? Clearly, all these things have other causes. The astrologers are deceived because the seventh and fourteenth days seem to correlate, but even here, as we have said, the stars do not necessarily agree with the progression of illness.

We observe this progression through sevens elsewhere in the works of nature, in situations where there is no suspicion about the motion of the Moon or Sun. We see it in the very periods of illnesses. Just as acute illnesses are often resolved on the seventh day, so long-lasting ones, as Avicenna writes, are often terminated in the seventh month, the seventh year, the fourteenth, or the twenty-first. I do not approve of those who superstitiously observe numbers here, but the courses of nature are mostly fulfilled, not because of constellations appearing, but because of a hidden property and condition of things.

As Galen himself writes, we see it has been arranged by nature that acute illnesses are affected on odd-numbered days, while those which are milder and more prolonged are affected on even-numbered days. Refer this to the Moon, refer it to the Sun and stars, if you can. Why should we attribute the agitation of the seventh day in acute illnesses to the Moon passing through square signs, when that is not even constant?

Some younger physicians oppose the opinion of Galen and others who turn to the Moon. Let a standard astrological argument be: "If someone, with the Moon in Aries, falls ill, they ought to have their critical day on the eighth, because at that time the Moon arrives at a square position with Cancer." These younger physicians then reply that this indeed ought to happen, taking into account the motion of the Moon, but agitation occurs on the seventh day because of the nature of the illness. When the illness is acute, it progresses on odd-numbered days up to the fourteenth.

Finally, true medical observation of critical days fails to confirm astrology. Indeed, it actually undermines it, serving as a strong argument that the conditions of bodies do not

depend on astrological causes. If the pattern in the days were not orderly, with now this day, then that day being critical, or some among the critical days being harmful at one time, others salutary at another, we would not investigate the cause, as the variability of matter would suffice to explain it. But since certain days are often (albeit not always) critical, and some tend more often towards life and others towards death, we seek a definite cause, one that is rarely mutable.

Galen believes that cause lies in celestial bodies, which move in a rarely-changing and stable manner, and produce a regular and stable effect. I, on the contrary, believe such a cause cannot come from celestial bodies, because otherwise different critical days would exist for different people, and the order apparent among them would not be preserved.

If the Moon were to join with Mars or the Sun, it would provoke an influence, causing agitation. If the Moon were to join with Saturn, it would delay it. Additionally, the conjunction of the luminaries immediately preceding the onset of the illness would have to be examined. If the ruler of the house in which the conjunction took place occupied the east, an agitation would quickly occur. If it occupied the west, agitation would occur slowly.

Furthermore, stars proceeding in direct motion, or positioned in mutable signs, would hasten the conflict between the disease and nature, while those retrograding or located in fixed signs would delay it.

These factors would not, however, coincide similarly for every patient in terms of the constellations. Rather, they would vary according to the individual condition of their nativity. I omit the angles Ptolemy advises to observe in order to predict diseases. Astrologers derive felicitous or infelicitous rays from them, which the most ignorant believe pertain to critical days.

If physicians derived all these things from astrologers, the critical days would not be as determined by medical art, but would vary for each person. Critical days would not be

fixed such that the sixth day would tyrannically destroy with cruelty, nor would the seventh day royally deliver with benevolence. The seventh day under harmful constellations and the sixth under beneficial ones would operate differently.

If variations occur, it should not be said that they arise from the heavens, where astrologers seek their causes. Rather variations should be attributed to the specific material or particular condition of the patient.

Chapter Seventeen

The periods of the humours are not to be attributed to the movements of the stars.

Let no one believe the cycles of humours in fevers derive from the motions of the stars. For example, that black bile subsides in two days and is stirred up on the fourth because it is under Saturn, whose motion is slower than the others.

By what reasoning does blood, which astrologers relate to Jupiter, perpetually putrefy without pause, when Jupiter is not the fastest of all planets? In the estimated time of restoration, Jupiter is the slowest of all after Saturn. Likewise, why has the motion of red bile been ascribed to Mars, when it is slightly slower than the motion of black bile? It ceases six hours earlier, with black bile subsiding in eight and forty hours and red bile in six and thirty. But the star of Mars is much faster than Saturn.

Moreover, astrologers claim the effects of stars are more enduring the slower they are. The motion of phlegm returns more quickly than that of red bile (six hours versus thirty-six), since the motion of the Moon, which excites phlegm, is faster than the motion of Mars, which excites bile… but why does the agitation of bile not affect the body for a longer time than the agitation of phlegm? Bile's effects last only for twelve hours, phlegm's for eighteen.

According to the principles of astrologers, the effects of Mars ought to be longer-lasting than those of the Moon. The Moon's motion is faster than that of Mars.

But if we wish to attribute these cycles solely to the Moon, as if it predominates over all humours, even then astrological reasoning will falter. Astrologers claim that phlegm, because of its affinity with the Moon and water, nearly imitates the motion of water. Waters flow and ebb with only a short delay in between, such as necessarily falls between direct motions. Phlegm leaves an interval of six complete hours.

This pattern could more fittingly apply to blood, whose continuous ebb and flow, like water, is observed. A short delay dividing the advance from the retreat does not correspond well to the six-hour interval of phlegm, during which the entire flux or reflux is completed. However, in blood, greater resemblance to water might be found. Even proponents of phlegm do not deny that blood's motion is interrupted by imperceptible pauses.

But let us proceed to the rest.

Black bile, they say, because it greatly diverges from water in its nature, moves in a manner opposite to phlegm. It rests for a long time, up to a full two days.

But to me, it seems water shares more in common with earth than with fire. Whether you consider its place, quality, or motion. Therefore, the same judgement applies to the humours in relation to the elements. The motion of red bile ought to differ more from that of phlegm than from that of black bile.

However, not one of the renowned and ancient physicians attributed the cycle of fevers to such astrological causes. The first to attempt this was Pietro d'Abano, a man born to gather more than to digest. Some of the less learned are accustomed to fervently admire those places in his writings where he babbles the most.

Chapter Eighteen

The misfortune of an eighth-month birth is not to be ascribed to Saturn.

While we are discussing these matters, it occurs to me that astrologers are accustomed to ascribing the misfortune of an eighth-month birth to Saturn. On this point, something must be said, lest by not refuting it, we apparently concede that the rays of the most hostile stars are capable of seizing mankind in an iron grasp. I am willing to concede that we are indeed affected by such stars. But I do not willingly grant that we are held by them in such a way as to be controlled. For I believe that, although influences descend from the heavens, they do not bring any harm.

Astrologers erroneously suggest those born in the eighth month die because each month of gestation is ruled by a specific planet. They claim that Saturn, the ruler of both the first and eighth months, a planet cold and dry – that is, contrary to the qualities of life – is the cause of this misfortune.

Firstly, handed-down tradition regarding the ruling turns of planets lacks any rationale, as will be discussed elsewhere. Moreover, the reason an eighth-month birth does not survive is due to other factors. There are those who believe the foetus attempts to emerge in the seventh month and is injured in the process. If it then exits in the eighth month, not yet having recovered its health, it is generally not capable of surviving.

However, I am more inclined to agree with Hippocrates, who, in his treatise *On the Eighth-Month Birth*, states that the reason why such births generally do not survive is that the womb's capacity for carrying the foetus during that month is particularly difficult.

At this time, pregnant women are in a more serious condition, experiencing severe and troubling afflictions in the womb. If they give birth, being overwhelmed by the double burden of labour and illness, they become extremely weak, which necessarily results in the foetus being born feeble and rarely surviving for long. Supporting this view is the fact that

healthier and stronger women are often able to give birth in the eighth month to children who survive. Avicenna writes that such women are found in Spain, and Aristotle mentions similar cases in Egypt.

I have appended the original Greek words of Hippocrates on this matter. Since this book is not commonly available, it should not be thought that we fabricated this information.

"Regarding the eighth-month birth, I state these two things: that they endure conditions which infants cannot bear, and consequently, eighth-month children do not survive, along with the other related matters that follow."

Chapter Nineteen

Why do sailors, doctors, and farmers more often predict the truth than astrologers?

Three main objections arise from that second reasoning of the astrologers.

Firstly, the changes in lower things caused by the courses of the Sun and Moon, from which astrologers infer both the action of other stars upon us and the likelihood of other changes caused by them.

The second is the testimony of the noble arts, medicine, agriculture, and navigation, which incorporate astrological observations into their practices.

Both these points we have refuted, so as to counter their arguments with the same weapons. We have shown that from the works of the Sun and Moon, and from the observations of those arts, one might deduce what they deny rather than what they affirm.

The third point remains, derived from the predictions of the same craftsmen and even the common people. As if we unfairly deny foreknowledge of future events to astrologers – those learned in the entire heavens – while even crude practitioners and ordinary folk sometimes achieve it. We see many predictions made daily about rain, illnesses, livestock, or

crops, confirmed by events themselves. Why should those wise in the causes of the heavens not be able to predict more accurately, along with other, more hidden matters?

This is what we must refute now, or, as is our custom, redirect back against the astrologers. This we will resolve plainly, effortlessly, and briefly.

If true predictions are made by these craftsmen without any consideration of astrological precepts, either their conjectures are trivial, or the things they omit and do not know are unnecessary and superfluous. Things not more hidden but more false, not doctrines but fabrications.

"But they are sometimes mistaken," says Ptolemy, "those who are ignorant of astrology." And yet, what of astrologers, who are mistaken more often? It follows, then, that astrologers understand astrology less than those who are not astrologers. For it cannot be denied that the statements made by physicians about the sick, farmers about crops, sailors about storms, and shepherds about livestock are more reliable than the predictions made by astrologers on the same matters.

The reason for this is immediately clear: astrologers observe signs that are not true signs and contemplate causes that are not true causes. Thus, they are deceived. For they consider celestial configurations, which, as universal causes, do not produce variations in earthly matters, unless conditioned by the material and the particular efficient causes of earthly phenomena.

It is not even celestial disposition which the astrologer observes, but rather a fictional arrangement in the heavens, created by the astrologer himself through the most baseless rules and fabricated conventions. Rules not established by nature but by the arbitrary whims of astrologers. It was not the Father of men and the God of gods who placed images, signs, parts, antiscia, dodecatemoria, houses, and other such astrological constructs in the heavens.

Rather, it is the astrologer, a deceiver of men and a slanderer of the gods, who has falsely imposed these things upon the heavens.

No wonder this art is incapable of predicting any future event with certainty. By contrast, the practitioners we mentioned, physicians, farmers, and sailors, rely on true, natural, proper, and proximate causes and signs. Consequently, they rarely deviate from the truth, and their genuine foreknowledge of future events lends credibility to their methods. They practice their arts with success and good fortune, securing trust through their accurate predictions.

Read the prognostic books of Hippocrates. You will never find him seeking the future condition of a patient among the stars. He knew such things were better discerned from urine than from a star, and that the state of health could be more accurately predicted from the pulse of veins than from the movement of spheres.

Skilled navigators do not predict storms from Jupiter, Saturn, Venus, Mars, or Mercury, but from clouds, winds, and every condition of the air. Their diligent discipline, confirmed by experience, can discern an impending storm from the faintest puff of wind or a barely visible cloud, long before any sign or warning is apparent to others' eyes. Not only do they foresee an impending storm, but they also understand from which direction it will arise, how it will unfold, and how it can be avoided or overcome. In comparison, all the wisdom of astrologers utterly falters and fails.

Shepherds, farmers, and often even the uneducated masses predict the condition of the air, not from the stars but from the very disposition of the air itself and the impressions occurring in the atmosphere. For this reason, they are rarely mistaken, making judgements about the air from the air itself, just as physicians diagnose illness from the sick person, relying on proper principles. By contrast astrologers judge from remote, general, and universal causes. Or worse, from fictitious, imaginary, and fanciful ones.

Therefore, let no one think agriculture would improve, medicine would become more effective, or navigation would become safer if these fields were handled by people steeped in and reliant on astrology.

Indeed, this would be a corruption and destruction of those arts, as they would be drawn away from certain rules to uncertain ones, from truths to fabrications. Through the admixture of false doctrines, all the solidity and truth of established experience would be undermined. This can be sufficiently demonstrated, even without resorting to intellectual arguments that demonstrate the vanity of astrology. The greatest masters of these arts, and those who have been exceptionally successful in their practice, not only avoided incorporating astrological observations into their work, but either despised astrologers or actively refuted them.

Columella, whom we cite elsewhere, the most meticulous author on agriculture, refers to his critique of astrologers when about to provide instructions on observing the seasons. He states: “The truths we have handled with plain wisdom are real, whereas the falsehoods the Chaldeans most shamelessly promise have been refuted by us elsewhere.”

Thus, when Ptolemy reasons *farmers foresee many things about the state of the weather; therefore, we should foresee even more and with greater certainty, given how much we surpass them in knowledge of celestial matters*, Columella would deny there is any truth in this conclusion. Possessing astrological knowledge, by which astrologers believe they surpass farmers, is not true knowledge but folly. Astrologers do not know more than farmers but instead fabricate more, magnifying the matters about which they lie, and using the pretense of their profession to cover their deceit.

They might have been placed among life’s most honourable roles, along with others, if only they made good and necessary arts better, like agriculture, medicine, and navigation. But frequent discovery of astrological vanity and deceit by the most prudent legislators

compelled them to expel it from their cities with the severest prohibitions, as we demonstrated in the first book. This was done to prevent astrology from corrupting both virtuous minds and beneficial arts with its most hidden poisons.

How much these common arts – nautical navigation, farming, and shepherding – surpass astrology when predicting future events, is evident from the following. Among sailors, farmers, and shepherds, there is general agreement about their prognostications. Among astrologers, however, there is none. So much so that Albumasar would not hesitate to set out on a journey without a hat on the very day Ptolemy predicted a deluge.

Chapter Twenty

Not all things predicted by astrologers depend on the primary qualities.

We now examine dependence on the primary qualities, since the third argument of the astrologers seems to demand this. Ptolemy uses this method to demonstrate that whatever happens occurs due to the stars, as his *Apotelesmata* declares. Astrologers always retreat to this position whenever defending themselves from the charge of superstition, or when they insist their claims proceed from nature, or when they argue that nothing they say lacks an apparent explanation.

They almost always resort to these primary qualities whenever they are asked why Jupiter causes one thing, Saturn another, and another planet yet something else. It will be shown in another part of this work, where astrological doctrine is refuted, that they speak in ways inconsistent with themselves and with the truth.

This refuge astrologers secure for themselves is proven futile by many arguments, beyond those we have already mentioned. First and most notable is that, in the determination of fate, the time of year in which someone is born has greater influence than any other

diversity of constellations. It also has a greater effect on the intensification or diminution of the primary qualities than any other stellar position or mixture of rays. Thus, summer days are always hotter than winter days, even if Saturn freezes and torments. On the other hand, winter days are always colder than summer days, even when Mars burns and rages, an inferno in the midst of Olympus.

If differences in fate arise from variations in heat, cold, dryness, and moisture, depending on how much these qualities prevail or diminish, it follows that those born in winter are always fated to be colder than those born in summer. This is especially true if, as astrologers are compelled to argue, the qualities of the air influenced by the heavens have a greater impact than the immediate conditions of seed and matter.

This is Ptolemy's foundation for natural astrology, with the rays of the planets producing the rest by means of the primary qualities. In which case, Ptolemy should solely predict the character and the fortune of men from that constellation which shapes and determines the bodily appearance, since from that everything else follows. Likewise, in universal predictions, only one thing should be examined: the future state of the air. When this has been determined, the rest will be revealed, since everything else is arranged according to heat and cold, to dryness and humidity.

But when Ptolemy or others speak about character in individual birth, or about accidental events, they rarely refer to the body's temperament in this manner. Nor will they agree about the storms of the year. They will proclaim about morals, about pestilence, about the harvest, and about wars, because they clearly investigate such things from very different constellations. Reading the astrologers' books and their predictions, this would not be hard to confirm.

Therefore, let astrologers cease this pretence, whereby they cloak their superstition in the respectability of a natural method. They claim they submit human affairs to the stars only

to the extent that the disposition of the air and the body's temperament depend on the primary qualities from the heavens. But they lie.

In entering into the art and asserting its possibility, Ptolemy espoused this pretence, but in the detailed practice of his doctrines, in their process and unfolding, he never observed it. Nor could he observe it, while still preserving the principles of the profession. Else astrology would be based on very few rules, with only the disposition of the air and the habits of bodies to be considered. The rest, derived from these very few rules, would be conjectured from the middle. But there are countless things in the books of Ptolemy and others that cannot in any way originate from the primary qualities of matter.

Chapter Twenty-One

Neither the harms of the elements nor the damaging of our bodies derives from the heavens.

From these things, the third argument for astrology can easily be rejected. The astrologers might claim that if changes in the air come from the stars, then plagues, floods, conflagrations, and famine do also. But we deny this. For it does not follow; on the contrary, whoever says these things does not know what the heavens are.

In the entirety of corporeal nature, what else is itself in any particular body, other than the very force that contains the whole, lest it flow apart, lest it be dissolved? Just as the heart in an animal is the source of that power by which integrity and order is preserved, and invading parts repelled.

Those excesses of the elements, whence fires and floods occur, whence scarcity, diseases, and pestilences arise, are no more accurately attributed to the stars than the diseases, and faults of our body can be attributed to the very power governing the body of nature. The

power whose role is to care for natural things, not to create them; to calm them, not to stir them up.

It is evident that primary qualities are one thing, while the deviations from those primary qualities are another. The heavens causing damage is no more plausible than denying the distinction between the laws and magistrates of a state and the faults committed by them, as if all were to originate from the actions of a good ruler.

A philosopher may believe whatever is ordinary and natural in the elements has its author in the heavens, but I do not know how he might believe deficiencies, deviations from the prescriptions and laws of nature, would arise from the same source. The principle of the philosophers is rather this: that elements remain within their boundaries, content with their own order. They do not trouble the universe. This is due to the celestial nature that governs and moderates the mutable and erratic realm of corruptible things.

But astrologers might say: if certain stars cause coldness and others heat, does it not follow that, with cold stars predominating, cold elements will prevail, and with hot ones, hot elements will prevail? Would it not follow that, with a great convergence of chill constellations, coldness might so overwhelm the waters that the earth is submerged in floods? Or with very powerful hot influences, that conflagrations might occur?

The response is simple and not singular. First, astrologers have invented the dominion of planets and signs. We shall later demonstrate the falseness of these claims. Why would any planet dominate the heavens in such a way as to produce prodigious effects in this world, especially harmful ones?

The heavens operate through the lights conspiring together in harmony. The celestial harmony is tempered, so just as everything is consonant within it, nothing ever dissonates through it into the lower world. Whenever something discordant, harsh, or incongruous is perceived in this world, it should not be attributed to the influence of the heavens. Rather it

should be attributed to the four strings of the sublunar lyre. These strings are formed from disordered and impure matter, which means when they are plucked by the celestial plectrum – which always strums them according to measure and harmony – one finds these strings regrettably resistant.

We must consider whether the various stars assigned to govern the elements are assigned for the purpose of perfecting the elements themselves. If this is the case, any given element will be more perfect the more powerful the star influencing it is. However, suppose the perfection of the parts does not contradict the perfection of the whole. The parts falter along with the whole. Then if an element transgresses its order and encroach upon the others, that will not contribute to the perfection of the element. Instead, the element will be perfect only when it no way deviates from the order and course of nature. Deviation can occur as much through excess as through deficiency.

Nothing can proceed from a star into a subordinate quality that does not align with good order and laws of nature. If Mars governs fire, then, that celestial governance should be as much about restraining what is tumultuous as it is about stirring what is sluggish. The four primary qualities originate from the heavens, yet their faults, transgressions, and disturbances do not arise from the heavens but rather from the movements of disorderly matter. Such movements do not always fully comply with the laws of celestial discipline.

I am inclined to believe that neither Plato, in the *Timaeus*, nor Aristotle, in the *Meteorology*, ever attributed temporary tyrannies of the elements to the influence of any constellation. Moreover, it is evident that not only the harms caused by the elements, but also the damages to our bodies and to other living beings, do not have their causes in the heavens. The heavens are the most noble among all bodies, distinguished by their order and beneficence. They do not produce harms that are instead the works of disorderly or deficient matter.

What we have said about the elements can similarly be said about the corresponding humours in our bodies. If Saturn governs black bile, Mars red bile, another blood, and yet another phlegm, the work of these planets is not to amplify these qualities excessively, but rather to restrain them and maintain them within a harmonious disposition for life. When Saturn is dominant, black bile will not rise up to destroy the others and undermine the whole. Instead, it will behave more orderly, composed, and beneficially.

The same must be said of red bile when Mars reigns, since the rays and nature of these planets are inherently beneficent and health-giving. Nor do Martian rays act like fire but rather, like the warmth inherent in us, they are guided by the hand of the vegetative soul, working rightly towards a determined end for the health of the living being.

Those vital lights, through their inner faculties and the instruments of their spirit, always act not for destruction but for the benefit and well-being of the bodies they govern.

With regard to black bile (if indeed he presides over it), Saturn will never exert any influence that is not orderly and life-giving. He will not excite it to the destruction of the living being, but will moderate it for preservation. Nor will the humours in the body, when their respective stars are predominant, act more violently and excessively, but instead more moderately and vivaciously. Never does death come from the heavens, but rather from flawed matter, when a quality degenerates to such a degree it cannot endure the discipline of its ruling star but either strays immoderately or fails through weakness.

Our diviners present themselves as not only interpreters but also patrons and defenders of the heavens. Yet they attribute not only diseases, supposedly caused by the excessive stimulation of the primary qualities, but even vices themselves, such as blindness and deafness, to the stars. More detestable still, they ascribe monstrosities to the stars. This is the height of absurdity and unimaginable nonsense. For what are monstrosities but errors of nature? No philosopher ever attributes these to an efficient cause, especially not to one that is

unerring; all refer them to matter. Nor has anyone been so insane as to claim monstrous births arise from the fault of the formative power, which, acting by the hand of God, commits no error. Instead, philosophers blame matter, which, due to its disposition, quantity, or quality, resists its maker. Matter is poorly suited for formation, and acts with defiance and rebellion against its craftsman.

It is far greater madness to condemn the power of the heavens than that of the seed. The former is less capable of error or failure. It is so much more potent by nature, and more closely joined to the Creator, by whom this seminal power is governed and shaped. It is absurd to think the motions and configurations of the heavens, if indeed these configurations modify the efficacy of the planets, are ever arranged other than in accordance with the natural order.

Otherwise, where does this order of nature, whose transgression produces monstrosity, reside? Where does it originate, if not in the heavens? How can anyone attribute an evil, disordered, and unnatural thing, whose origin lies in flaw and weakness, to the primary causes of nature? Such causes are the best, most orderly, and most powerful of all. How can astrologers then justify their reasoning?

Averroes truthfully writes that whoever believes Mars, or any other star, harm bodies in any configuration, believes something entirely foreign to all philosophy. And so it is. No profession is more injurious to the heavens than the superstitions of astrology. Everything we do contrary to reason is the fault of the will, and everything that occurs in matter contrary to order is a result of flawed, fickle, and unstable matter. All of this, astrologers blame entirely on the stars, thinking the stars' dignity cannot be preserved unless even the most unworthy actions are credited to them.

Chapter Twenty-Two

The diversity of talents and character does not entirely depend on the primary qualities.

But if the stars do not cause harmful bodily conditions, perhaps they at least produce bodily differences. Not morbid, not corrupt, not accidental, but within the bounds of nature's integrity, moderate and differing according to the ratio of temperament.

It seems entirely reasonable that if the stars are the sources of the four primary qualities – so drier and colder bodies are conceived or born under Saturn, warmer ones under Mars, more humid ones under Venus, and so on with the rest – this diversity of temperament may correspond to a diversity of talents and dispositions of the mind. Not such as compel us but such as stimulate us. This matter, however, will be treated more extensively later. For now, let us consider whether the dissimilarity of talents and character can arise from this. It is true in some sense, but also false in other respects.

The dominant qualities in the body also somewhat affect emotions, so those with a predominance of red bile are more prone to anger, those with phlegm are sluggish, those with blood are more cheerful, and those with black bile become melancholic. But this is rather general, and it does not always correspond to obvious evidence. Nor does it satisfy some more subtle and particularly specific conditions of character.

I say it does not always correspond to evidence because sometimes you find people with particular temperaments apparent in the body, and yet their inner character, not made by choice but driven by nature's inclination, can be very different.

I have seen, under a virginal face, a wild savagery, and under a harsh and unpleasant countenance, a gentle and lovable meekness. Others, bearing an appearance of joy and grace in the face and mouth, secretly smoulder with sorrow and discontent; still others, whom you might judge slaves of Saturn, brighten everything with humour and wit.

These qualities can achieve their powers and results by a different means, according to most philosophers. Thus they are neither the primary qualities themselves, nor their daughters or appendices. We will clarify shortly that many things predicted by astrologers about the diversity of character cannot truly be attributed to the primary qualities.

Chapter Twenty-Three

Neither wars nor external affairs depend on the primary qualities.

The notion is truly laughable. That if the stars can create cold, heat, and other qualities, they can also supposedly cause wars, rebellions, topple cities, and alter empires. The reasoning behind this position is no less absurd. For they say that when red bile is stirred up in the bodies of kings and princes, their more fervent passions lead them to be more eager to commit or retaliate against injustices. Oh, blessed Italy, flourishing in perpetual peace if only you could have phlegmatic rulers!

This great and divine benefit could be achieved with something small: a tiny dose of a purgative medicine to remove red bile, properly distributed among the more warlike rulers, would pacify the entire world. Who would refute this notion rather than mock it?

As if this were truly the sole cause of wars; as if avarice were not more to blame than anger. Or desire, opportunity, and the hope of gain. As if feuds and hatreds, assigned by astrologers to Saturn rather than Mars, play no role. As if even the love of justice does not sometimes incite wars and upheavals. As though it is not often the will of God that stirs the minds of kings. Sometimes He trains the good in virtue, sometimes He punishes the wicked through the agency of other wicked men, those whom He uses as executioners in the world, like visible demons.

Yet, while astrologers may speak nonsensically here, they do seem to say something of substance. But how do external matters, which are not altered in the least by our bodily humours, relate to those four qualities? Exile, honours, wealth, poverty, children, wives, friends, and enemies… how do these correspond?

"They have an affinity with the mind and body," says Ptolemy, "so that honour and dignity pertain to the mind, while a wife and wealth pertain to the body."

What sort of affinity is this, O Ptolemy, that chance events follow the condition of the mind or body?

Or is it as you often claim: if the influence of Mars makes someone choleric, the same influence also brings them wounds and violent death, because the heat of bile incites quarrels and leads to arms, and thence death? Yet we often consider it to be the greatest work of the stars when a mild person, living peacefully, offending no one, is nonetheless drawn by some fatal force into dangers, into violence, into enmities – as if against their will – while, conversely, a belligerent person, a provoker of hornets, lives a long life and dies unharmed at home among their own.

Why, then, does one who lacks Martian heat still meet death by the sword, which is said to be Mars' domain, while another, burning with Martian heat, dies peacefully? Even though they are naturally more prone to violence? It is conceivable that certain aspects might bear connection to qualities within us, and thus be attributed to the constitution of the body. But things like spouses, wealth, honours, and other such generalities… how could these be rationally connected to differences of body or mind? To even imagine such a thing is utterly absurd.

Ptolemy himself, in the first chapter of his treatise *Apotelesmata*, where he constructs his argument regarding the influence of the stars, concludes nothing more than that some

degree of diversity in body and mind – inasmuch as the mind is tied to the body – arises from the stars. However, he says nothing about matters of fortune in that context. He writes thus:

"One might say at any given time what the condition of the surrounding air will be. Furthermore, one might understand the individual constitution and temperament of any person, deducing it from the state of the air at the time of their formation. Consequently, the astrologer could predict what kind of body and what kind of mind a person will possess, and how they will fare over time. By foreseeing the future disposition of the air as it relates to the particular temperament of the body, they could determine whether it will contribute to the person's well-being or, if discordant, provide an occasion for illness and disease."

Ptolemy discusses these matters here, and, as is evident, makes no mention of external affairs. However, in the very next chapter, where he reiterates what he has said and connects it to subsequent points, he also adds external matters, as if he had proven those as well. Perhaps he assumes the reader has already forgotten the reasoning by which the earlier points were demonstrated and validated, thereby allowing the reader to be misled.

Therefore, even if we grant Ptolemy that the primary qualities of matter – moisture and dryness, cold and heat – might change according to the condition and arrangement of the stars, we by no means concede that the stars determine the varying fortunes of humans.

Chapter Twenty-Four

The stars do not possess occult powers through which they bring forth the hidden properties of inferior things, but only vivifying heat and light.

It remains to be discussed whether, beyond the effective power of these qualities, there exist more occult and eminent forces in the stars. Forces through which they can achieve effects that cannot be accomplished by primary qualities alone, just as the magnet

attracts iron by a certain property, or the peony aids those suffering from seizures. Powers perhaps more noble and efficacious than the primary qualities of matter itself. This is the claim of the fourth argument, which asserts that the stars must necessarily abound in such virtues. If, as nearly all philosophers state, it is by the benefit of the stars that earthly things obtain such qualities, then, being the noblest of bodies, the stars must necessarily be endowed with the noblest attributes.

But neither the nobility of these celestial bodies, nor the claim that the wondrous and hidden powers of earthly bodies derive from them, is sufficient proof that such powers reside in the nature of the heavens – other than the vivifying power associated with heat.

To address the latter point first: it is a misunderstanding to say that lower bodies receive their powers from the heavens, allowing them to perform actions that cannot be accomplished through the four primary qualities alone. Attributes and powers flow from the innermost principles of the bodies themselves, that is, from their forms. Or, if you prefer, their essences.

Just as the heavens impart a form to these bodies, from which their motion follows, so they are said to bestow such powers. However, the diversity of these powers arises not from the diversity of celestial configurations but from the diversity of mixtures, from whose varying proportions emerge distinct forms. This very point enhances the dignity of the heavens. What is divided into multiplicity in the lower order exists in a unified and more eminent form in the higher order.

If the multitude of sublunar bodies, so diverse, numerous, fleeting, fragile, disorderly, partial, and constrained, is referred to the celestial body – eternal, incorruptible, simple, vast, and universal – it is entirely reasonable that powers distributed among lower beings originate from that primary body. Celestial bodies, despite their variety and multiplicity, bestow their influences equally through their single endowment of light and heat.

These influences, communicated in varying degrees through the celestial order, establish a hierarchy rather than a fundamental diversity.

There is no need to delve further into the nature or essence of this endowment. It requires no demonstration, for it demonstrates itself and all other things together with itself. This light, evident to all, flows from the moving body. Accompanied by the warmth it imparts, it symbolises for us the hidden mystery of divinity. It signifies power in motion, wisdom in light, and love in heat. Through these, God, the prime mover of all, inspires, illuminates, creates, perfects, and preserves all things, just as the heavens are the first and highest of all bodies.

Beyond the prerogative of this triple efficacy, dependent in an orderly manner on a single body, what more do we desire from the heavens? What does it lack in order to achieve the utmost perfection of corporeal nature and the sovereignty of the lower world?

To be adorned and distinguished by multiple specific properties is a mark of imperfect nature. It detracts from the dignity of perfect nature, whose characteristic is to possess collectively in one entity what the lower beings hold dividedly and in parts.

If it did not pertain to the perpetual motion of the celestial body and its light-giving warmth, this prerogative would indeed necessitate seeking something else in the heavens. Something that, with a simple and unified act, encompasses and contains the power of any and all corruptible bodies.

But if this is fully found in the heavens, there is no need to contrive something else; and it is undoubtedly found there, since without it no corporeal thing can either generate or, once generated, carry out its operations. Remove it along with its heat, and neither will peony assist the epileptic, nor hyacinth staunch blood, nor rhubarb expel bile. Just as the efficacy of anything acting upon us would cease if the warmth of our innermost being did not stir it, so

would the virtue of earthly bodies, and even the very heat of living beings, cease unless they were individually nourished and mutually joined by celestial heat.

The activity and perfection of the powers instilled in earthly things is precisely this light imbued with heat, insofar as it warms. In turn, the perfection of all warmth is light, insofar as it shines.

And just as colours cannot be seen, nor can the eyes see, without the aid of that light, so the qualities of bodies cannot subsist or interact if they are deprived of that motion and heat. It pertains to the dignity and beauty of the heavens that they shine with the singular splendour of their innate light, rather than a great diversity of colours. It similarly pertains to their perfection to possess a single virtue that surpasses all others in nobility, rather than a manifold number of material virtues. Just as light surpasses all colours, and constitutes the perfection of their arrangement. Just as light is the perfect constitution of all colours.

Nor does denying the heavens particular qualities detract from their dignity. No more than we think it detracts from the heavens that they are neither yellow, nor blue, nor green, nor purple. Variety is beautiful and necessary in earthly things, but neither possible nor fitting in the stars.

Chapter Twenty-Five

If each star is granted its own and proper power, that power must still be universal.

If someone were to argue that, beyond this common property of motion, light, and heat, each star possesses its own unique influence, I would not strongly oppose them, though I could. I would remind them that these powers, by which the stars differ among themselves, nonetheless agree in this: they are all celestial powers. Whatever exists in the heavens, even if

particular when compared to the entirety of the celestial order, is nonetheless universal when referred to the sublunary world. Even if it is exceedingly narrow in scope.

When I say 'universal,' I wish it to be understood as follows: that it encompasses within itself the entire perfection of the corruptible world. Otherwise, it would not be celestial, as I have already partially explained and will soon elaborate further.

But if this is conceded, the stars possessing peculiar powers will add nothing to the matter of astrology. The property of Jupiter differs from that of Saturn, yet for that reason, Jupiter will not produce effects on us distinct from those of Saturn. Through their respective properties, both will be equally capable of producing all effects. I will not deny that the Jovian power differs from the Saturnian; yet no power of lower bodies exists which is not equally contained, generated, preserved, rendered effective, and perfected by both the Jovian and Saturnian influences alike.

I will first explain why this is so, and then how this diversity in properties and actions can coexist with commonality.

The nature of the heavens cannot be explained more clearly and concisely than this: the heavens are the unity of all bodies. Indeed, there is no multitude that does not depend on its unity, nothing in the universe that does not derive from a single fountainhead. Just as in an army, each legion defers to its commander, and the entire army to one general, so too does every series of things, bound together by a shared kind, have a single principle from which it is derived, nourished, governed, and held together.

There are many such principles, a kind of manifold unity, but these are ultimately reduced to the most simple unity of the first principle. All number is in a sense contained in unity, an entire city in its king, or an entire army in its general. So too is all virtue and perfection of any group contained in its principle.

In this collective condition, that which is divided, incomplete, unfulfilled, and limited, flourishes in the head (or principle), with the singular embrace of an infinite unity: pure, effective, and perfect. No part of the body can exist in the head, and yet the whole body can be said to exist in the head.

The first among beings, ineffable God, is simultaneously none of those things that exist and all of them, by a certain eminence of principal nature and universal power. On what principle will the corporeal realm depend, if not on the first body, both in rank and dignity? And this, of course, is the heavens.

Thus, it is true that the heavens are the unity of all bodies. With regard to the heavens, everything attributed to other bodies may be denied, and yet everything may also be affirmed. Denied, because that which is formed and finite in those other bodies, or discrete, manifold, and imperfect, takes on neither those formal characteristics nor such diversity in the heavens. Affirmed, because the heavens encompass all these things simultaneously. Not by the potential of matter, but by the magnitude of celestial power and the sublimity of the heavens' original nature.

If this is the nature of the heavens, it applies to all celestial bodies without exception. Nor does the whole of the heavens contain the entire perfection of inferior bodies, while a part of the heavens contains only part of that perfection. Such a view deprives the heavens of any unique privilege. Instead, any single part of the heavens is the entirety of the inferior world, excepting those things that are *in* the world but not *of* the world.

This is what the Pythagoreans signified by their allegorical statement: the entire sublunar region is a single star, and within each celestial star exists everything that is observed in our own region. In the Moon there are distinctions of the four elements, valleys, and mountains, as well as plants and living creatures, just as there is on Earth. Likewise in Venus, Mercury, and the other stars.

By this imagery, the Pythagoreans undoubtedly convey no more than what we aim to demonstrate. Namely, there is no star in the heavens that does not encompass everything under the Moon.

Otherwise, these stars would not possess a celestial nature. If it is correctly supposed that nothing is truer of celestial nature than its being the unity of corporeal nature, this would indeed be a privilege worthy of the heavens. That with such vastness and countless lights, the heavens should contain the virtues of the narrow and confined sublunar realm.

Thus, within the power of any star resides the total power of all perishable bodies. The powers of stars do not differ in that some govern certain things while others govern different things. All stars preside over all things. The difference lies not in one star having a broader scope than another, encompassing more things. Rather, the difference lies in the nobility of what it contains. Each star contains the same as the other, but in a way more unified and exalted than the lower counterpart.

This same principle can be observed in the relationship between separate intellects and the cognition of living beings. Just as all bodies depend on the heavens, so all cognitive power partakes of and depends upon the intellect. By *intellect*, I do not mean the human faculty of reason, but the intellect of angels, which philosophers refer to as *minds* or *intellects*. This intellect exists in and of itself, requiring nothing beneath it to understand what it knows. It neither errs nor struggles.

That which, in any category of cognition, is distributed across various faculties, is possessed in a more excellent and unified power by the intellect. The intellect perceives truth within itself, and touches it directly with the certainty of intuition. It holds truth within itself even as external things fade, retaining them through the imaginative faculty. It comprehends the causes and forms of things, both corporeal and incorporeal, with rational clarity. Not

through reason, sense, or imagination, but through its intellectual property. This superior faculty collects what is perfected in these lower faculties and rejects what is imperfect.

For in us, physical knowledge differs from mathematical knowledge, and mathematical knowledge from divine knowledge. Physical knowledge is attained by reason combined with sense, mathematical knowledge by reason combined with imagination, and divine knowledge by reason united with mind and intellect.

Furthermore, there is no mind, however insignificant, that does not perceive the entirety of truth in its own light – truth we either grasp or strive for through sciences and arts.

Let us then compare these intellectual faculties with corporeal ones. In us, there are these arts and sciences, and in the entirety of cognizant nature, various kinds of knowledge correspond to the diverse powers found among bodies. All cognition is a participation in intellectual light, just as all corporeal power is a participation in celestial faculty. Yet, just as cognition shines more clearly in reason, so does corporeal power manifest more perfectly in the spirit of the heart.

With these premises established, let us consider whether intellectual rays emanate from those minds, forming distinct types: some producing physical knowledge but not mathematical, others producing mathematical knowledge but not divine, and still others producing divine knowledge rather than physical or mathematical. This light would correspond to various disciplines, according to the differing natures of the minds from which they originate, rather than arising from rays directed by the intention and will of the same mind.

There is nothing of this kind which these minds cannot bestow abundantly, and which they do not grant freely by their very nature, as the stars do. If it happens that one thing is received rather than another thing, this should be attributed not to the giver – who is equally generous to all – but to the capacity and condition of the receiver.

If, as we have said, the relationship of the stars to corruptible bodies is analogous to that of the mind to fallible cognition, any star can grant whatever the receptive body, whatever its nature, is capable of receiving. The diversity of hidden influences arises not from the nature of the influencing star, as the astrologers suppose, but from the diversity of the matter being influenced.

I speak of hidden influence because the action of a star, through its light and heat, can vary in intensity and effect based on the strength or weakness of its rays. A star projects and diffuses itself, propagating its forms and images. Just as intensity or remission is imperceptible with regard to a star's allegedly hidden properties, so we are not convinced to posit any diversity in their effects.

"But," you may argue, "the power of Jupiter and this diffused quality are certainly different from the power of Saturn."

I agree. However, this does not mean they would produce different results, since there is no entity in the sublunary world that either of them could not bring about.

What, then, is the nature of their diversity in action? Both accomplish the same result, but each does so in its own way, one more nobly, the other more sublimely. Yet I am uncertain whether we should think of these powers in such terms, or whether the influence of a lesser power might be more effective on us. Not because it is spatially nearer, but because it is more akin to our nature. However, this inquiry belongs to another discussion.

Here we assert only this: if, beyond light and heat, each star is granted its own particular property, all universal effects can be defended in such a way that no intrinsic diversity is introduced among lower things.

Nevertheless, we could grant some particular power to each star – reducing their stellar potency. We could grant it in such a way that this would still be of no help to astrologers. Perhaps the stars always act the same upon all things, but all things are not acted

upon in all cases. Rather, one star acts upon one thing, another upon another, as the following example shows.

All bodies consist of matter and form. Let us suppose, then, that the three lesser stars (the Moon, Venus, and Mercury) act upon what pertains to matter, with their duties divided as follows. The Moon governs matter itself. Form, however, is arranged by Venus and Mercury. By Venus the arrangement is through quantity, as when there is order, figure, composition, and due beauty in the parts. By Mercury the arrangement is through quality, as when it, with malleable mobility, induces dispositions suited for receiving form.

The abiding forms proceed from the three higher stars (Mars, Jupiter, Saturn). What pertains to the essence of form comes from Saturn. What gives being and life to living things comes from Jupiter. What moves them internally and excites them to action comes from Mars.

But that any one thing diffuses itself, and by diffusion makes itself known and propagates itself, will be attributed to the Sun. The Sun overcomes the matter from which it produces a likeness of itself, and affects both generation and manifestation.

So what if the operations of the planets were to differ? Let us concede this, but not from reason, nor from the credibility of experiments. Nor from the authority of Plato or Aristotle. In that case, the diversity of lower things would arise not from the heavens, but from lower causes. The agent always acts in the same way in all things, but its work varies in effect. Sometimes by proximate causes, sometimes by the disposition of the matter.

To ascribe particular powers rather than universal ones to the stars – when no reasoning persuades us even of universal powers – could without impiety, be suspected about certain matters. It would enjoy the authority of learned men too. But, as the following book will show, if such powers exist, they are not those astrologers claim. Nor are we affected by them in the way astrologers believe.

Chapter Twenty-Six

The epilogue of this book, with the rejection of certain astrological arguments. The turning back of such arguments against the astrologers.

We have examined those natural changes of lower things which seem to be the work of the heavens. Concerning the chance events of humans, we will address that when dealing with the fifth argument. Otherwise nothing has been found that favours the astrologers. This has instead been an opportunity to raise objections to their doctrines, such that the astrologers might regret having stirred up this contentious matter.

For what else do we conclude, other than that sublunar bodies are affected by the rays of the luminaries? But nothing else save for heat, vital heat, the action of which cannot be altered except according to the position of the star – that is, from proximity or from directly irradiating us. From these principles we account for all effects, whatever astrologers bring forward in defence of their doctrine.

It has become clear that astrology is not confirmed by observation, but rather weakened. We have revealed astrologers as either deceivers or deceived.

Thus, the astrologers falsely believe in the drying power of the Sun, or that the Moon moistens and cools with little healthfulness. Falsely they imagine some hidden power in the Moon, beyond its motion and light, which calls back and pours forth the sea. Falsely they hold Saturn responsible for the harm of an eighth-month birth. Falsely they ascribe powers and diversities of virtue to the signs, for the Sun's ray operates solely according to its variety of position. Falsely they refer critical days and the cycles of fevers to the motion of the Moon or other stars. Finally, the notion that changes caused by the Sun and Moon might be taken as proof of astrological decrees… this is so in error, one is instead rendered suspicious of astrological falsity.

The astrologers argue thus: if someone sleeps under the Moon, numbness overcomes their limbs, and at the same time sea urchins are filled with moisture. Therefore, the Moon cools and moistens. The senses attest that the Sun is scorching, therefore it is dry.

We, on the contrary, press this point: the Moon fills sea urchins, therefore it is warm. We have demonstrated this from Aristotle. Those sleeping under moonlight are numbed with cold, therefore the Moon is warm. We have explained how this happens with clear reasoning. When full, the Moon favours conceptions, and nourishes bodies; when waxing, it strengthens and invigorates, therefore it is warm. We have proved this from Hippocrates and from evident experience itself.

Concerning the Sun, we likewise appeal to experience. It is evident that all life's spirit is invigorated by its rays. But this is not a power of dryness, but of healthful warmth. Nor has it proven difficult to explain how the Sun, accidentally or otherwise, dries, burns, or even cools.

It is said falsely that the Moon is the cause of cold and moisture. Both Sun and Moon by their nature are sources only of vital light and heat.

In like manner, the astrologers argue: we see our bodies clearly altered by the Sun and Moon. Therefore, there should be no doubt about the influences of the other stars.

But this very matter of the other stars casts doubt, because of what we see regarding the Sun and Moon – namely that from them alone, the conditions of bodies are found to vary. We might judge the other stars as irrelevant. Meanwhile, as the light of the Moon decreases, moisture in bodies is always diminished. It always increases as the light waxes.

If what the astrologers believe about the efficacy of the other stars is true, why do the lower-ranking planets, when they dominate, not sometimes compensate for the loss of lunar light and increase moistures? So that it might be permitted for us, by the favour of the stars, to dine on succulent oysters even during the new moon?

When the Moon is full, why does Saturn's dryness, or Mars – usurping the law of the heavens on behalf of the astrologers – never dry out bodies or protect cut wood from rot?

Observation favours those who deny the power of the planets, rather than those who assert it. It also favours those who attribute no efficacy to the signs, rather than those who attribute too much. Otherwise, since the sea is moved by the Moon, as astrologers claim – and we ourselves do not deny – why do the tides not move more when the Moon is in aquatic signs, rather than fiery ones? Or less when the Moon is in dry ones, rather than moist ones?

Why does the Moon not produce more abundant tidal flows when in it is conjunction with moist planets, as opposed to conjunction with dry ones? Suppose what the astrologers predict about the twelve regions of the sky, which they call houses, is true. How does it make sense that, as the Moon rises from the east and approaches mid-heaven, it acts more strongly upon the ocean, and thus more strongly from the twelfth house than from the Ascendant? Astrologers affirm that the power of all stars grows weak and becomes feeble in the twelfth house.

Evidence therefore rather stands against the astrologers. Why then, against all reason, should we arrogantly favour their opinion? Unless, as Favorinus suggests, and as we also touched on earlier, we rely on one key point – that the ocean, as if the companion of the Moon, wanes and waxes along with it. Astrologers think this an argument that all human affairs, both small and great, are bound, led, and ruled by the stars and constellations.

But it is a very different situation. The same Favorinus mockingly references the silliness and absurdity of the notion. Just because the ebb and flow of the ocean coincides with the Moon's course, that does not mean some legal case concerning someone's water supply, which he perhaps has before a judge, is governed by the heavens.

Chapter Twenty-Seven

Remaining is the final argument, sought from human events. Some venture beyond all powers of reason, and here assert the force of a fatal and celestial power. At present, we shall show human events have their causes sufficiently within us, and nothing appears among them that requires the heavens as an author. Nothing in the course of human affairs arouses the suspicion that human deeds are governed and directed by the sky. At the beginning of the next book, we shall first argue that these things, in which astrologers see the force of fate, can in no way be done by the heavens.

Human affairs may be divided into two categories, great and bad.

Let us first speak of the great things, and whether these pertain to the mind or to external matters. Astrologers cite both the fortune of Alexander and the genius and learning of his teacher, Aristotle.

Let us begin with those things that pertain to the soul. You admire in Aristotle the perfected knowledge of natural things; I equally admire it with you.

"The cause is the heavens," you say, "and the constellation under which he was born."

I disagree. Not for the common reason that many born under the same star were not Aristotles. But rather because, besides the heavens, which serve as a universal cause under which both the swine of Boeotia and the philosophers of Attica spring forth, there are particular and specific causes proper to Aristotle. It is to these we must attribute his singular advancement.

Firstly, as he himself says, he was endowed with a good soul. This, certainly, was not from the heavens, since the soul is immortal and incorporeal. Aristotle demonstrates this himself and astrologers do not deny it. Then Aristotle was endowed with a body suited to serve such a soul. This body was not from the heavens, except as a universal cause, but from his parents.

He chose to pursue philosophy. This, as we have said, was the work of his foremost attributes – his soul, his body, and his own free will. He excelled in philosophy: this was the result of his chosen purpose and his diligence. He surpassed many who philosophise. The teaching of his mentor and the fortune of the age in which he lived were contributing factors. The period was full of the writings of the ancients, but not so perfected as to lack space to begin new works, or the material for developing and completing beneficial arts.

But Aristotle advanced far beyond his contemporaries and his disciples. He was endowed, not with a better star, but with a better mind. Nor was this mind from a star. It was incorporeal, from God, just as the body is from the father, not the heavens. About this, we speak more honourably than astrologers, inasmuch as a universal cause is more divine and exalted than particular causes.

If either Aristotle or another philosopher surpassed the limits of human intellect, this would be due not to any inferior cause, including celestial ones, but rather to a superior one, that is, a divine cause. Socrates, whom I consider the greatest of all philosophers, attributed his wisdom not to natal stars but to the deity that assisted him.

Therefore, we assign too much to the heavens if we derive the divinity of souls from corporeal rays. On the other hand, we assign too little if we attribute physical differences, which pertain to individual circumstances, to the heavens as though they were particular causes.

But we assign far less than is fitting when we attribute our mental flaws and moral failings to the stars. This is one of the reasons people take refuge in astrology: they observe certain bizarre desires, which seem to have an external cause rather than an internal (that is, human) one. Because that cause is powerful, they deem it astral.

I would ask them why a pregnant woman prefers to eat dirt and charcoal rather than the finest delicacies. And if they discover the cause of this monstrous craving lies not in a star

but in the foetus, I would urge them to look for the cause of other marvels – which they attribute to the heavens – in the body's constitution instead.

I might attribute such human behaviour to the wickedness of demons, but I would separate their influence from that of the corporeal realm. Certainly, beyond the condition of the body, one sees custom contribute to such monstrosities, as I can demonstrate with a most truthful example.

A man still lives, known to me, who is afflicted with prodigious and unheard-of lechery… who is never aroused to the heights of Venereal desire unless he is flogged. He contemplates his crimes so vividly, so hungers for the savagery of the lash, that he rebukes the flogger if they treat him too slowly and gently. Indeed, he is not fully satisfied unless blood has burst forth from his wounds, and the violence of the whip has lacerated the innocent limbs of this most wicked man.

With earnest entreaties, the miserable creature demands this service from every woman he approaches. He offers a whip, which he himself has hardened for this purpose by soaking it in vinegar the day before, and then humbly requests to be beaten by the harlot. The more harshly he is struck by her, the more fervently he becomes inflamed. He strives equally towards pleasure and pain. This singular man finds bodily delights amidst torment.

He is not otherwise the worst, but he recognises and hates his disease. Since he has been my acquaintance for many years, he freely revealed his suffering to me.

I inquired about the cause of such an unusual affliction.

He said, "I became accustomed to this from boyhood."

When I asked again about the cause of this habit, he explained he had been raised with the most wicked boys, among whom he encountered freedom of violence. He obtained disgraceful shame at the price of mutual exchange.

I have not suppressed this account, although it sounds uncomfortable, so we might understand how habit influences the passions, and so we do not immediately accuse the sky, as if there were no earthly cause. If an astrologer were to hear this account, he might say Venus was damned at the man's birth, and perhaps threatened by adverse rays, or in some other way threatened by the rays of Mars.

Let us now discuss external matters, in which Alexander was exalted. It has been asked whence his great and sudden success might have arisen, unless it came from the heavens. The answer is easy: from the virtues of Alexander, of which he had many. All those necessary for an Emperor: courage, generosity, endurance of toil, skill in military matters, excellent education, and others which it is not necessary to enumerate.

His success also came from the army he had obtained. This army had been very well-trained under his father Philip, had been further rendered warlike by the advantages of the region, and was most devoted to Alexander because of his generosity and virtues.

Alexander's success further came from the cowardice of the peoples he conquered. He was said by his uncle to have fought with women. And finally from fortune, which rules most in matters of war.

When I speak of fortune, I do not mean heaven, but rather that cause which Aristotle mentions in the second book of the *Physics*. That which we call fortune in the common sense and are accustomed to express with the words: 'thus fate willed it,' 'thus it happened,' 'thus the matter fell.' It is through this cause that those playing at dice either cast what they wish or what they do not wish.

This is blind fortune, which, apart from the causes we have mentioned (and similar ones) has made Caesars, Sullas, Augustuses, and Alexanders. Blind fortune does not depend on heaven. Nor is it the same as fate. Nor does it detract from Divine Providence. What it ultimately is or is not shall be discussed in detail in the next book. It suffices here to state that

we will crush the astrologers with no lesser weapons than those of St Thomas Aquinas, whom they mistakenly think their greatest ally.

As for the matter being treated here, nothing so great happens or appears on earth that it deserves heaven as its author. The marvels of the mind are greater than those of heaven, while those of fortune and the body, even if they are as great, are trivial when compared to heaven. As Favorinus rightly says: there is nothing great in man except the mind and the soul. If you ascend to these, you transcend heaven; if you incline towards the body and look up to heaven, you see yourself as a fly. Or even less than a fly.

In a black swarm of ants, there are some that surpass others in strength, size, and there are victories, wars, peace, duties, labours, poverty, and riches, which, when we observe them, all appear insignificant and without distinction, amounting to nothing. So too are our little bodies, our fortunes, our kings, our provinces, our wars, treaties, and marriages entirely nothing when compared to the heavens. To the heavens, the whole earth, or that small fragment men divide among themselves with fire and sword, is a mere indivisible point.

The magnitude of earthly matters mean they cannot be the work of the heavens. If someone is unworthy of the heavens, who among us is deemed worthy, how much more unworthy are those things which we commit unworthily, such as the promotion of the wicked to honour, the death of Socrates by the judgement of a fortune-teller, and other such enormities, of a type we see and endure every day.

In human matters, Maternus claims that fate, and the necessity of celestial decree, shines forth. I would gladly ask him and other astrologers why they are so eager to attribute our errors to the stars. Why, when we sin, they would rather accuse the heavens than us. As if it were surprising that we, prone to wickedness from youth, err. As if the heavens, serving the commands of the best God with unchangeable order, could themselves err.

“The innocent are condemned,” they say; “the wicked are rewarded with honours.”

By whom, I ask. By just or unjust rulers?

If this were the action of just rulers, not even the heavens would be sufficient for such a miracle. If it were the action of unjust rulers, what need is there for the heavens, when malice, which scorns the heavens, suffices?

Aristotle asks in the *Problems*: "Why is it that good men are almost always poor?"

After listing many causes, both true and witty, he does not propose any from the heavens, as he clearly understands thorns and thistles are produced not by the heavens but by the earth.

Why does a cautious and prudent man, who most of all avoids danger, still sometimes stumble into it, while another, who frequently and recklessly exposes himself to peril, escapes unharmed? What is there to marvel at? When such things do not happen, it is just as remarkable as when they frequently happen.

When events of this nature occur frequently, their cause must be sought. First, of course, the nearest cause. If this is lacking, we must seek a more remote or hidden one. However, when dealing with rare and chance occurrences, no other cause can be investigated, if we recall what wise Aristotle left written, both in the second book of *Physics* and in the sixth book of *Metaphysics*.

Here ends the third book of Giovanni Pico della Mirandola's Disputations Against Divinatory Astrology.

Disputations Against Divinatory Astrology

By Giovanni Pico della Mirandola, Count of Concordia

Book Four

Chapter One

This custom has been observed in disputation and must continue to be observed. Even if theologians grant to astrologers that astrology is the greatest truth, astrology would still amount to nothing.

Our usual method in disputation is as follows: if the opponent presents something which can be denied without impiety, and also reasonably contradicted, we choose to deny it rather than concede it. Even if it is something which, if conceded, would not significantly advance their argument. Proceeding this way, we arrive step by step at the opponent's strongest assertion, and demonstrate that, even if that point is granted – it has already been shown as reasonably deniable – it still does not lead to the opponent's conclusion.

In this way, the subject under debate is explored in detailed fashion through its individual components, and the opponent is forced to understand how many assumptions they have gratuitously made. Assumptions either evidently false or at least highly doubtful. Furthermore, no matter how the issue turns out, the opponent's argument cannot entirely avoid being shown as false.

Adhering to this method, we first argued that only the rays of the Sun and Moon have the power to affect changes on Earth. The other stars have no influence, due to either distance or the weakness of their rays.

Secondly, if it were granted to astrologers – not because they have forced the point, but because they request it – that some influence flows from all celestial bodies, we demonstrated that this influence would differ only in degree of intensity. It would consist merely of light with a life-giving warmth, since cold, moisture, and dryness do not emanate from the stars.

Thirdly, even if the stars produced the four primary qualities (heat, cold, moisture, and dryness), it would not follow that impressions occurring in the heavens arise from these qualities. And if this were the case, it would still not result in pestilences, cataclysms, or conflagrations being caused by them. Much less could external events, subject to chance and fortune, be governed by the stars through the power of these four primary qualities.

Fourthly, even if the stars were the authors of the primary qualities, that is, possessing the power to heat, cool, moisten, and dry, it would not be reasonable to attribute additional powers to them, by which the stars could accomplish things that cannot occur through the force of these qualities.

Finally, whatever virtues and properties the stars possess would be so universal that all would encompass the true condition and power of lower bodies. Thus, the stars would act upon all things simultaneously with everything, the characteristic of a universal cause.

The entire diversity of things that happen and occur derives from proximate causes, whether free, natural, or fortuitous. We have undertaken the defence of such causes with this aim: that astrologers might understand, when they think and assert otherwise, that they are not speaking of things self-evident and manifest. Rather, they speak of matters neither confirmed by any certain reasoning, nor by clear experiment, nor by the authority of Plato or Aristotle. Astrological claims remain ambiguous, subject to opposition by many just as they are advocated by some.

If astrology relied on firm foundations, and did not lay down less trustworthy ones for itself, it would not be utterly ruinous in my opinion. Rather, it would be unstable; that is, it would fall as much as it would waver, according to my judgement. However, even if we were to grant astrologers as much as St Thomas Aquinas and other theologians and philosophers, astrologers would still struggle to maintain the validity of astrology, not only among us, but also among the angelic minds themselves.

Thomas grants to astrologers as much as one can without openly misrepresenting the truth. Namely, that the influences of all planets, along with their power, flow forth to us, and that different stars have different properties. Not only of heating, cooling, moistening, and drying, but more occult powers, whence the earthly receives various gifts. By this reasoning, the properties of humans and other earthly bodies do not solely come from their proximate causes, but some also from the heavens.

Provisionally granting all this to astrologers, we shall show their art does not depend on these foundations. Instead, astrology prophesises about things from the stars which cannot be done or indicated by them, even if we concede all the above. Astrology has already been shaken by the previous book. With no lingering hope of peace or indulgence, the present disputation will utterly overturn it.

Chapter Two

Chance events are not from the heavens.

On account of the good or bad outcome of chance events, we call people fortunate or unfortunate. Such events are primarily thought to be fateful and dependent on a celestial decree, but are likewise the largest and most important part of astrological prediction. Those things which inherently have proximate causes, such as the conditions of the mind and body,

do not demand a higher or more hidden cause, as compared to things that happen by chance and accident, since those latter appear to occur without a proximate cause.

Such things include sailing successfully or unsuccessfully, traveling, engaging in commerce, digging for buried treasure, encountering robbers or wild beasts, gaining the favour of a king, escaping danger, experiencing good or bad fortune in service, entering a house about to collapse, and other events of this kind. All happen beyond our planning or expectations to wretched and frail mortals. As they are entirely beyond our control, and come upon us from external sources, we are especially eager to hear the opinion of astrologers.

Otherwise, anyone could know the condition of their body from a mirror or a doctor, just as they could know the state of their mind from themselves, provided they have a mind. But what we call fortuitous events are precisely those which human curiosity most eagerly seeks through divinatory arts. These, above all else, we will prove cannot be foreseen by celestial causes, and we will do so following the reasoning of St Thomas Aquinas, particularly in the passage where he seems most favourable to the astrologers. That is, in the third book of *Contra Gentiles*, where he appears to assert that men are made fortunate or unfortunate by the heavens.

The reasoning is as follows: the power of a celestial body does not act with intellect or choice but as nature does. It is characteristic of nature to aim at one thing; therefore, an effect that is not one in itself cannot arise from a natural cause. Those things that converge accidentally, and coincide with one another, are not truly one in essence but only one incidentally. Consequently, such a concurrence, which we usually call fortuitous, cannot have any inherent natural cause.

But since a celestial cause is also a natural cause, it likewise cannot inherently be the cause of such fortuitous events. Aquinas adds an example, which simultaneously illustrates how the heavens are not the inherent cause of such events but only incidental to them.

Someone, he says, is incited by the heavens to dig up a grave. It also happens that a treasure is in the grave. Therefore, while digging the grave, the person finds the treasure. This was not caused by the heavens so that the treasure might be found, except by coincidence. It is by coincidence that the grave and the location of the treasure coincide. Inciting a person to dig up a grave in which a treasure is hidden, so that they might find the treasure, is a function of a rational and intelligent cause, whose characteristic is to relate and arrange one thing to another. This is not the role of a natural cause, which is directed solely towards one thing, as we have said, and such is the nature of the celestial influence, which no one would deny.

Chapter Three

How God is the cause of chance events. Angels, the heavens, ourselves, and fortune.

When discussing chance events, it is worthwhile to explain more thoroughly what their causes are, according to philosophers and theologians. From what we have said, it might be thought that we refer such matters merely to chance and randomness, and that astrologers should not be criticised for attempting to establish order and definite causes, even in these extraordinary occurrences, so that nothing in nature happens by chance or without a legitimate cause.

If such a cause must be conceived, it seems most appropriate to choose the one astrologers accept – the heavens – since no such power is judged to exist beneath the heavens that concerns all things under the heavens. Nor, the astrologers claim, does such a power exist above the heavens. For many things happen undeservedly, contrary to merit and reason, which points more to the necessity of a physical cause than to the providence of one who chooses deliberately.

To dispel these doubts, it would be useful to discuss these matters more broadly. After we have demonstrated that these things cannot be governed by the heavens, let us now reveal from where and how they are governed.

We call events ‘chance’ if they occur beyond the intention of the agent. A typical example, used earlier: a farmer proposes to dig the earth, wishing to cultivate of the soil, not to find treasure. It happens that he finds a treasure. We call this a fortuitous event, and we do not ascribe the cause of the found treasure to anything other than fortune.

By fortune, we do not mean divine power, or nature, or any other cause. Rather we exclude all of these possibilities, saying merely that the event happened by chance. As if to say “it happened by chance, not from any cause.”

The digging of the earth cannot be called a cause. The earth itself cannot be called a cause, inasmuch as it is the earth; it merely happens this very place is both the earth and the hiding place of treasure. What caused the event of the unearthed treasure? There is no single cause, but rather the fortuitous conjunction of many causes.

This is why those who deny fortune exists are mistaken. Aristotle himself refutes such notions in the second book of *Physics* and the sixth of *Metaphysics*. Such people are mistaken, not because they think chance things can be known and anticipated by higher minds (and thus there is no absolute or simple concept of fortune), but because they assume such events must necessarily have a proximate cause. They do not understand that something accidental does not require a single cause.

For instance, a man being both a musician and a soldier does not have a cause for this combination; otherwise, if they were together, they would have an order between them derived from that cause. But those things that happen to a soldier, such as being a musician, or to a musician, such as being a soldier, clearly do not have an order between them. Therefore, they do not have a cause by themselves, but only by accident.

Thus, the Peripatetics rightly defend chance and fortune in events, rejecting necessity. Yet some of them err even more grievously than those who deny chance altogether, by claiming that these events happen only fortuitously, that is, without the guidance of a higher cause or providence. This most pestilent error arises from the root of impiety, which believes either that human affairs are not known by higher beings or, if known, those beings care not for human affairs. This error will be refuted elsewhere, in a discussion of impious philosophers. For now, it should be dismissed as conclusively false, based on the authority of all theologians and the entire philosophical tradition, including Aristotle, the leader of the Peripatetics. In Aristotle's ethical works, where he discusses happiness, and where he addresses good fortune, he most clearly affirms that humans are under the care of the gods. Especially the wise. Moreover, Aristotle explicitly states that all sensory things, both past and future, are known to God, and that we are guided by Him in these matters. He also confirms this in his treatise *On the Universe*, a work worthy of Aristotelian wisdom, which he concludes with the famous Platonic doctrine on divine justice, as if crowning it with the seal of an oracle.

If God cares for human affairs, including guardian angels and the true order of intelligent causes that serve God's counsel and Providence, no one should doubt that humans are often prompted to act in ways unknown to themselves but arranged with the utmost wisdom by higher beings. The most common example is that of servants sent by their master to meet one another, though unaware of their master's will. Their meeting, while unforeseen and fortuitous to the servants, is foreseen and preordained by the master.

In providing for the well-being of a poor farmer, a guardian angel might, through hidden impulses, invite the farmer to dig where the angel knows a treasure lies hidden, so that what appears to the farmer as fortune is, in fact, deliberate counsel on the part of the angel. As St Augustine writes in the fifth book of *The City of God*: "We do not say that causes

which are called fortuitous, whence fortune derives its name, are non-existent. Rather they are hidden; and we attribute them to the will of the true God or any spirits whatsoever."

Augustine says "any spirits" because such things can be caused by both good and evil angels, though the evil cannot achieve everything the good can, nor do they share the same purpose. The good angels aim for the common good of humanity, while the evil ones aim at harm, though their malice is frustrated by divine goodness, which orders and redirects the evil into something good. But this matter can be discussed elsewhere.

Proclus the Platonist, in his commentaries on the *Timaeus*, defines fortune in a similar way to Augustine. He claims it is a daemonic power that brings together otherwise disparate causes. This does not differ much from the Peripatetic explanation, which says fortune is a cause acting incidentally in human choices. The difference is that one points to a more remote and hidden cause. The other considers a proximate and known one.

Proclus refers to a "daemonic power" because the Platonists use this term to describe any minds placed between humans and higher intellects, separated from particular and immediate knowledge of our affairs. Let us clarify these matters with examples, to understand how chance events happen and also to grasp the role of the heavens in them.

Lucius was at home and had no particular business to attend to outside. However, he nevertheless felt inclined to go out. As soon as he left the house, the building collapsed. You would call him fortunate for avoiding imminent danger. If you were to ask the cause of this event from an impious philosopher, or indeed a poor philosopher, they would answer that it happened by chance, and no other cause should be sought. If you were to ask an astrologer, they would attribute it to the favourable influence of some beneficent planetary radiance, by whose power Lucius was protected from the collapse.

All these are mistaken, as explained above. Prompting Lucius to leave the house so that he might not perish belongs to the reasoning and deliberation of an intelligent and acting cause. Something neither the influence of Jupiter nor any other star can achieve.

This could only be attributed to the heavens, insofar as Lucius' inclination to leave was stronger than his inclination to remain. This might also have stemmed from his bodily constitution, which makes some people more sedentary and others more ambulatory. If this favourable outcome had any astrological cause, it would be one of those influences that invigorate and make us more active, the so-called Martial qualities, rather than any beneficent or protective influence guarding us from harm. As I must repeatedly emphasise (this point is crucial), a celestial ray cannot order or coordinate events, such as Lucius leaving his house and thus avoiding the collapse.

Just as Lucius, choosing to leave for a walk, fortuitously avoids mortal danger, so any constellation influencing him towards movement acts in a manner entirely accidental when it results in his deliverance. Even if an astrologer were to discern the influence of the heavens on Lucius at that moment, they could determine no more than that he was likely to feel a desire for walking. The astrologer could not predict that Lucius would escape danger, for no astrological chart or reasoning provides evidence for such foresight.

There remains only one cause by which this event could have been foreseen. The divine will, which subtly moved within Lucius' soul, prompting him to leave so he would not perish under the collapsing house. The same divine power understood that the house would fall, and ordered Lucius' departure towards this end.

This cannot be assigned to a corporeal ray. Thus, no philosopher has ever defined fortune as the result of celestial decrees, natal charts, or other notions drawn from astrological dogma. Instead, philosophers refer fortune to the event itself in a random and unforeseen

concurrence of causes, or else to intellectual causes, which align events through their own reasoned intent, escaping the bounds of human foresight.

Thus, when the great prince of philosophers, Aristotle, discusses fortune and misfortune, he does not refer to celestial constellations. Nor does he even consider investigating or debating them. He deems the genethliac opinions of astrologers unworthy of a philosopher's doubt, and places them among the delusions of tricksters and charlatans, rather than among the legitimate controversies of philosophy. In that same treatise, after thoroughly examining the entire question, Aristotle concludes with this:

"When something good happens by chance, it can occur in two ways: either we stumble upon it by accident, without awareness of the circumstances that lead to the fortunate event, or else we find ourselves drawn by an inner inclination – not by deliberate choice or careful consideration – and the reasoning is unknown to us. In such a case, we merely follow where that inclination carries us, as though we lower the oar, and sail to its persistent direction."

The first scenario is attributable to chance, while the second is ascribed to divine cause, by which human will is subtly steered through hidden impulses. Those who experience this often express it as: "I have a feeling, though I don't know why," "I can't choose otherwise," "I am drawn in this direction," or "my mind won't turn to anything else." Though they can provide no reasoning for their choices, they insist, often with unwavering certainty, that their inclination is as it is, and their will is preordained.

In this context, Aristotle asserts that all things are known to God, and that our will can be moved by nothing more sublime than God. He affirms this to be a great argument for immortality. From all these points, it can therefore be concluded that certain human affairs happen by chance, some by nature, some by choice, and some by divine counsel.

For although nothing happens outside of God's counsel, we nevertheless make this distinction. Those things happen divinely which human minds would not accomplish left to themselves, but achieve when moved by a particular impulse of the divine will (apart from that general assistance of the supreme power to all things, without which nothing, not even the smallest thing, can exist or happen).

Although it is proper to humans to act by choice, we are sometimes governed by nature when, enslaved by the motions of bodily affections, we do not wait for the judgement of reason. These points are explained by a single example.

A king declares war on his neighbours. Perhaps the cause lies in the warlike, greedy, and restless nature of the king; perhaps he is not so much driven by passion as by reason or the right of claiming what is his, avenging an injury, or some other cause.

Beyond all this, it is possible for a special counsel of God to intervene, always just, always rational, though its justice or reason is not always evident. God's counsel, I say, both inspires one to undertake war and, when it pleases Him, arms one for victory. As said in the Book of Jeremiah: "Behold, I will take all the families of the north, and Nebuchadnezzar, the king of Babylon, My servant, and I will bring them against this land and against its inhabitants and against all the nations around it."

And in Isaiah: "Assyria is the rod of My anger, and the staff in their hand is My indignation. I will send him against a deceitful nation and against the people of My wrath I will command him, to despoil, to plunder, and to reduce them to a trampled thing like the mud of the streets. But he does not think this way, and his heart does not understand it."

Chapter Four

If something happens that seems to exceed our powers, it should not be attributed to the heavens. Rather, it should be attributed either to the angels or to God. And here, many things are said about fate, and how divine foresight does not take away our freedom.

When something is done by a human that seems to exceed their abilities, our mortal nature is often struck with awe by the unusual and marvellous event. We are inclined, by the greatness of these occurrences, to suspect the presence of a more powerful cause, acting within and through the human, surpassing the limits of human capability. In this suspicion, those who have only the eyes of flesh are drawn to the heavens – since they see nothing greater than the heavens – and foolishly attribute such things to an irrational cause, one devoid of knowledge, but one they nonetheless believe is greater than all the designs of the human mind.

If they respond that such things are indeed arranged and ordered by God, but are accomplished by God through the heavens and stars, whose power and efficacy they claim to be great, they speak absurdly. If such intervening causes exist between God and us, they must, being lower than God, also be higher than humans. It is improper to say that matters governed by reason and deliberation, like our own, should be directed by irrational bodies. Just as God governs and moderates the 'lesser' elemental world through the 'higher' celestial world, it is fitting that human affairs are governed not by bodies but through the mystery of angels, who by their nature and dignity serve as mediators between us and God.

Therefore, when descending from God to the earth, descend through the heavens. When descending from God to mankind, descend through the angels.

Thus, angels – of the Persians, Greeks, and Hebrews – are regarded among the prophets as providing for their peoples. Among Plato and the Platonists, it is the local gods,

set over cities, kingdoms, and men. Mention of this is also made by Aristotle, and the more ancient Isidore, and after Isidore, Clement of Alexandria's *Stromata*.

Nor should it trouble us that certain things seem unworthy or unjust, so that we would resort to a cause acting through natural necessity rather than through deliberation. It would be laughable if the vilest slaves of a city presumed to judge the plans of the ruler. It would be much more laughable, indeed sacrilegious, if we were to presume judgement here. The will of the highest order and divine wisdom extends the eye of its Providence, and the ray of its goodness, not for the benefit of one man, one family, or one city, but for the whole world, not for the present age, but equally for all ages.

Shall we, mere little men – owls, moles, asses, oxen, and the indolent – judge these things and call God to account?

Indeed, we judge more often not by that little judgement we possess, but rather by the sickness of the soul. We complain that whatever happens contrary to our will has been done unjustly. Who would not have cried out that God was asleep when the righteous Joseph was sold by his brothers? Who would not also have asserted that there was no God when the same man received imprisonment as reward for his chastity? Behold him soon in Egypt as king, or second to the king; behold him redeeming his father and entire family from famine; behold him renowned for prophecy, and you will not deny that those earlier things were done by God, through which progress was made to later things.

If you look more deeply, you may understand that from impious commerce came many things. The whole people went into Egypt, and after being long oppressed by the Egyptian kings, they were brought gloriously into freedom by Moses. God's power was confirmed by so many wonders, with oracles made manifest in Pharaoh, in Egypt, and in the Hebrew people. Through the law, through miracles of divine majesty, now by beneficence, now by justice, foreshadowing ineffable mysteries of divine incorporation under Jesus.

Even a madman could not think that anything in human affairs happens without reason. Therefore, some imagine it is not governed by the best and wisest God. It is an evil demon among the Manichaeans. The body or the necessity of celestial revolutions among the astrologers. Random chance and necessity, among many bad philosophers.

Whenever wars are stirred up, or murders, or the devastation of cities and the overthrow of kingdoms, think not this is a mixture of two rays, or the light intervening in its natural course between the Sun and Moon, but rather the plan of God, either punishing the wicked or exercising the righteous.

Hence, he who was called the Scourge of God, and another closer to our age, did not say he was a man, but rather the Wrath of God and the Desolation of the World. Herodotus tells of a wise man of the Persians, who, while a Theban reclined at his feast, revealed to him the future disaster of his people. When the Theban urged this be reported to the commander of the army, and advised against an unfortunate undertaking, the Persian replied that it was inevitable for the man, and God had ordained it to happen. Neither by his own words, if he were to admonish the commander, would the commander believe the future, when it had been thus decreed by God. He also claimed to be bound by necessity to follow Maridonius (such was the name of the prince).

The Persian speaks of necessity, not as that of the stars, but as that of divine counsel. If anyone calls this fate, St Augustine says, he speaks with little precision. This name of fate, as much as can be gathered from the writings of the ancients, has fourfold meanings: that fate is either nature itself, or the series and order of causes necessarily producing all things, or the configuration of the stars, when something is born, conceived, or begun, or the execution of divine counsel, a certain and inevitable outcome.

It is interpreted in the first sense by Alexander of Aphrodisias in his book *On Fate*, addressed to the emperors Severus and Antoninus [Caracalla]. He admits there is such a thing

as fate, in that fate is nature itself, which is a principle distinct from choice. Thus, by fate fire heats, water is wet, and the Sun illuminates. Likewise, when someone dies due to a disordered bodily temperament, they die by fate. But if someone falls from a horse or is slain by swords, they do not die by fate.

In this way, Virgil writes of Dido, preparing death for herself: "because she was perishing neither by fate nor by a death owed to her."

Astrologers would indeed attribute that kind of death to fate. Thus Demosthenes...

Accordingly, no one denies the existence of fate, just as no one denies the existence of nature. Aristotle, in the fifth book of *Physics*, calls generations 'fatal,' that is, those that occur according to nature. Nor is there any doubt that, when we understand fate in this way, many things happen beyond fate, just as many things also occur beyond nature – whether by chance, by our own choice, or, as Alexander of Aphrodisias himself says in the same place, by the counsel of the gods.

But those who developed the second opinion considered that in nature itself, nothing happens without necessity, if someone were to encompass all causes at once.

Those who claim that many things happen outside necessity defend this view in regard to both natural events and those involving human choice. In natural matters, they argue not everything that happens arises necessarily from nature, since the work of nature can be impeded. In matters of free will, our choice and free will are free.

Those on the contrary insist thus: in natural matters, if something is impeded, it is necessarily impeded. Even that impediment arises from a natural cause, which in turn is ultimately traced back to the supreme nature, that is, the heavens. This supreme nature acts necessarily.

But they are mistaken; for although the impediment was caused by something natural, that cause itself could either exist or not exist. It could be impeded while it was acting;

therefore, that impediment was contingent, not necessary. And if you press us again about that impediment – which as a natural cause itself, just as it acts naturally, so too will it necessarily either be impeded or not impeded – I reply that if you believe the world to be eternal or infinite, it will progress from one contingent cause to another contingent cause, among which the order will always be accidental. It will never reach one necessary first cause, from which necessity would be introduced to subsequent events, since no such cause exists among natural ones. Even celestial causes, whose works are easily obstructed by material and inferior concurrent causes, are not exempt.

But if you agree, in accordance with theological truth, on the creation of the world, you will arrive, through inconvenient regress, at the first contingent establishment of things. From this necessity is removed, not confirmed.

They infer necessity for our choices in a far more irrational way, since the will chooses nothing that has not been prejudged by reason, and it is not in our power to will to judge in any particular way. But they rely on false assumptions, which will be clarified in other contexts by others and elsewhere by us. For these matters require separate, specialised treatises and are not particularly relevant to refuting astrologers, whose third understanding of fate must be refuted in its entirety.

This differs from the first opinion in that it makes celestial nature not only the origin of natural things but also, as we have seen, of chance events. It misunderstands lower causes greatly, and misconceives celestial causes most grievously. For although the heavens may be natural, the constellations they invent, based on the positions of stars, through places, signs, houses, and other such concepts, are not natural causes but fabrications.

Neither does the operation of celestial bodies depend on that single initial moment, nor can they be attributed what pertains properly to lower causes, as we have already explained and as subsequent points will make clearer.

There remains the fourth theological meaning of fate. The first was more physical, but both are true. It signifies a series and order of causes dependent on divine counsel, under which our freedom is in no way endangered, since we too are among the causes. In this dance of fate we not only suffer but also act.

Therefore, whether you consider God's foreknowledge or Providence – that is, His mind, foreknowing all things, or His will, arranging all things according to His pleasure – there is no prejudice against our free actions. If it is foreknowledge, why do I not freely do what God foreknew I would do? If what He foreknew will happen, I will freely do what He freely foreknew I would do.

But also, because what He wills will happen, and He wills me to be free, I will freely do whatever I do unless He Himself takes away my freedom. Indeed, not only did God foreknow our wills, but He also preordained them. When Gregory of Nyssa and John of Damascus deny this, they deny it only in the sense that, while other things are arranged by the Divine Will, our choices are arranged by it in conjunction with our will.

Not only the outcomes of our thoughts, but also the thoughts themselves, the very plans and intentions – of kings, and indeed everyone – lie in the hand of God. He alone governs all things, inclining the will in matters that pertain neither to vice nor to virtue, as it pleases Him.

If the fulfilment of His decrees require it, at one time He initiates virtues within us, and perfects them, at another time He turns those moved from virtues to vice back towards justice. God applies the rod of a pedagogue out of mercy or punishes the deluded for the sake of justice, He always makes things good, or at least provides opportunities for goodness.

This much we have said about fate, Providence, and the governance of human affairs, both because these topics are useful to understand in themselves and because they are necessary for overturning astrological vanity. Accordingly, when we see something that

appears too significant or too orderly to be attributed to chance or human agency, we should not understand it as the force of physical rays, but rather as the care, authority, and power of divine counsel and angelic ministry, working alongside human freedom.

It is clear how future events can be foreseen and how, since they are evils, they can be guarded against. If human affairs occurred merely by chance, no foresight of future events could exist. However, since they occur by human and divine counsel, human reason can conjecture somewhat about them. Only those inspired by divine will can foresee them with certainty, as the predictions of the prophets and oracles confirm.

Although they are far inferior to the prophets, the prudent come closest, as expressed by Euripides: “He who conjectures well makes the best prophet.”

In procuring success, and avoiding misfortunes, the most important thing is to reconcile God to oneself by purity of mind, pious works, and the holiest vows. After this, a man should look to himself with prudence; for although fortune may have great influence, most, or indeed everything, depends on the disposition of divine will. A proper way of living must necessarily hold great weight in these matters, unless this gift bestowed upon us by God is in vain.

No divinity is absent if prudence is present, but we make Fortune a goddess and place her in the heavens. For this reason, Plato, in his letter to the Syracusans, recalls that Homeric saying, “The gods have taken away their minds,” and instead suggests man has taken away his own mind. All this is confirmed by that sentiment of Euripides, who says fortune is the daughter of the soul.

The wise arrange their lives through natural reason, and secure divine benevolence through pious religion. Let us avoid all superstitious vanity. Otherwise, whoever hopes to foresee the future or to avoid evils through astrological observation will hear Isaiah saying to

them: “Evil will come upon you, and you will not know its origin. Calamity will rush upon you, which you will not be able to expiate.”

Chapter Five

Neither past events nor those things concerning others can be foreseen from any constellation.

But if astrologers have something to answer concerning matters of chance – though such an answer can be neither true nor plausible – what will they say, concerning those things that precede the hour of the nativity? How can an efficient cause be later than its effects? What of those things which are not only prior but also foreign, and therefore have their causes not in the constellation of nativity, but elsewhere? For instance, when astrologers pronounce the natures and fortunes of parents, grandparents, and elder siblings from the hour at which a son is born?

These things prior to the constellation, and likewise foreign to it, already have their order and dependency of fate from their own past constellations, if indeed we think that there is any fate derived from the heavens. Likewise, in the case of him who is born, how does the natal constellation produce that which he received many days before his birth?

Astrologers predict from the nativity chart whether one is born is male or female, maimed or whole, beautiful or deformed, and other such bodily conditions, all of which had already been determined before, as Lucilius says, when the infant was delivered from the mother’s womb. By what reasoning do astrologers claim the prediction of these things for themselves? A cause is not subsequent to its effect, nor are things foreseen from the heavens, otherwise than in the manner by which effects are foreknown from their causes.

Haly Avenrodan's commentary on the *Apotelesmata* of Ptolemy, tries to resolve this very question. He seeks to show how the fates of parents can be foretold from the nativities of brothers or children.

Avenrodan argues that when a woman has sexual intercourse with a man, she does not always conceive, but only when the intercourse takes place at an hour when the constellation agrees with the constellations of the parents. Since things that agree necessarily agree with themselves, if the natal constellations of all the children agree with the constellations of the parents, they will also agree among themselves. Therefore, they will mutually signify one another's fates. Thus, from the brother's nativity, the brothers' natures and fortunes, and from the child's nativity, the nature and fortunes of the parents, are demonstrated.

But as for me, I do not know if I should first refute or ridicule this astrological subtlety. Haly Avenrodan says, "A woman does not conceive except at the hour when the position of the stars agrees with the stars of the parents." Therefore, the fates of the parents ought to be foreseen not from the hour the child is born, but from the hour the child is conceived.

But if the father was born under one sky and the mother under another, how can one single constellation correspond to such diversity? Or, if Avenrodan thinks this occurs through some variety of the stars, how will the charts of numerous children correspond simultaneously to the charts of the father and mother, when the signification of the parents must in every case be sought from the same stars and the same regions of the sky?

The fate of the father and mother is investigated from the fourth and tenth places of the sky, and from the Sun, Saturn, Venus, and the Moon. The disposition of these in the nativity charts is almost always varied and diverse according to the diversity of the children. This variety must differ from the constellations of the parents, for something must disagree with another when it first disagrees with itself. Moreover, the same father might be both

fortunate and unfortunate, since one of his sons has the fourth place illuminated by fortunate rays, while another has it besieged by unfortunate ones.

To avoid this problem, astrologers are accustomed to claim the fates of the parents are not to be foreseen from the nativities of all their children, but only from the eldest. But this is contradicted by the nativities of the siblings, which the astrologers claim agree among themselves precisely because all harmonise with the constellations of the parents.

Why should one labour further in refuting something so evidently frivolous? How is it that a woman does not conceive unless the one conceived is destined to be born under a constellation which will signify to the astrologer the fate and nature of the parents?

To astrologers, the sky and all of nature serve, and nothing happens in the universe except in a way that allows the astrologer to divine it. But once again: how does one foretell the fate of the brothers or parents from the hour a child is born, when that supposed fate has already been determined in the brothers, or the parents, long before?

The opinion that this is not done by the stars but only signified by them, we will later refute. For now we critique those who believe the sky itself is the cause of what is predicted from the heavens, as Ptolemy and all the leaders of this art believed.

Chapter Six

Things that will happen much later in time cannot be caused by the present constellation.

If we reason correctly, not only can past events not be caused by the present constellation, but neither can events occurring much later in time. This notion is, however, extremely common, and is most frequent in the predictions of astrologers. Where among them is it not written that a planet rising in the east produces what it promises in the first part

of life, while one in the west does so in the last part? That the planet occupying the Ascendant position or ruling the Ascendant gives its effects early, followed shortly after by the one holding the rights of the tenth house? That the one near or ruling the west acts late? That the one located at the lowest part of the sky acts even later, and countless other things of this sort? All finally attesting that what constellations produce does not occur for many years afterwards, when that arrangement of stars no longer exists?

There is no virtue or natural action – which astrologers admit celestial influences to be – which is more effective when it no longer exists than when it does. The celestial influence does not remain in the body like medicine.

But perhaps astrologers will reply that, even if the position of the stars has passed, the power infused into us endures. In due time, according to the nature of the agent and the receptivity of the material, this power will then bring forth its effects.

Regarding the nature of the agent, I raise my previous objection: that the nature and condition of the effects are indeed varied according to the diversity of agents and their powers. But it is common to all causes that they are more effective in producing their results when they exist than when they have long since ceased.

As for the material, if the argument is that one does not immediately become a king or a philosopher at birth, even if the heavens promise it, because age renders this impossible… this may not seem absurd. But when one reaches the age capable of receiving the gifts the natal stars have promised, why, then, does it not happen, since both a sufficient cause has already preceded, and suitable and apt material is present? Either the astrologers say the effect is delayed by as many years as the planet was distant in degrees of the zodiac from such a position, or that because the planet held such a place in the chart, it was late in bestowing its benefits.

But if the heavens were to immediately give what they promise, save that the disposition of the matter is delayed, it would not be for the astrologer, who considers the heavens, to foreknow the times of events, but rather for the one who knows the state and condition of the matter. He may hear from the astrologer what is to happen, when he himself demonstrates to the astrologer what is to happen.

As for the force derived from the heavens remaining even after the stars have changed, I would like to know where this force is preserved. Surely it must be either in the material or in the lower and secondary causes. Whichever of these, or both, it matters little. Astrologers should know that neither in the flux and reflux of material in motion, nor in the varied and mutable multitude of particular causes, can a celestial force remain both identical and stable for such a long duration.

This, however, pertains to a rational nature, dispensing its gifts at a time chosen according to its will and judgement. It cannot belong to, nor be, a natural cause.

Chapter Seven

Concerning auspices, which they call elections. How vain and impossible is the opinion of the astrologers.

Now we discuss that which astrologers consider most useful for life, namely auspices, commonly called elections. That is, how the heavens supposedly determine the success of a given action at a particular hour, as opposed to another hour where that action must fail. Although such things are easily said, and have the appearance of probability at first glance, when they are examined more carefully, they shall be found vain and impossible.

Astrologers claim if someone undertakes a journey under a particular configuration of the heavens, they will have a successful journey, will be received kindly by a king, and will

increase their personal wealth. On the other hand, if they mount a horse or board a ship at another hour, they will experience difficult journeys, dangerous sailing, and will fail to achieve the purpose of the journey or voyage.

I confess, I do not understand how such things are caused by the heavens. Let the astrologers explain it to me themselves, if they can.

Let it be that Jupiter hurls his rays from the ninth house to the earth. They will call it a favourable constellation for undertaking a journey.

Does that fortunate outflow and influence affect and inspire the people about to undertake a journey, or the very action of the journeying? That is, the mounting of a horse, the departure from the house, or something of the sort, the beginnings of a journey?

If the astrologers respond the former, the people will be inspired, even if at that very moment they do not begin the journey. Rather, they will benefit from the influence of the star whenever they intend to undertake the journey, especially since, according to the astrologers' argument, the constellation does not grant its gift while it exists but often after a long interval of time.

If they respond the latter, they will wander into much foolishness in defending their position, explaining how exactly the mounting of the horse under Jupiter's influence softens the road underfoot and drives bandits away. And, with the clouds dispelled, makes the sky calm and bright.

Nor is there little trouble with the downstream logic of this position. Perhaps the journey of many days is completed, but perhaps that the power which descended from the heavens when the person mounted the horse might, by reciprocal reasoning, ascend back into the heavens when he dismounts. The traveller would thus require a new Jupiter every time he mounts the horse again. To imagine some power, primordial and rooted nowhere, which does not remain anywhere, and yet ensures the entire journey is completed smoothly and happily,

is the work of people who dream even in delirium. Men who speak without thought, and who offer only the futile babblings of mindless sound.

Let us consider whether they encounter the same difficulties in matters that are more our works than the operations of the stars. Ptolemy opines that if Mars occupies the middle of the heavens at the founding of a city, the rulers of that city will generally perish by the sword. Let Ptolemy explain where precisely this blood-drenched influence of Mars is received, a curse destined to destroy so many later rulers by the sword!

If this influence is received by the founder of the city at the time it is built, I shall ask how the stones cast and buried in the ground – the city's foundations – bend and redirect the celestial rays towards that founder. And how does the harmful influence, as if by hereditary right, descend to his successors and the heirs of his rule, when the original receptacle has perished? Truly, I do not see how astrologers could respond to such a question without shame.

They might perhaps claim it is not in the founder of the city that receives this influence, but rather the city itself, instilled within the very first foundation stones. A plague then takes hold, so all subsequent rulers are afflicted by the pestilential influence of Mars, as if by some deadly breath. War, indeed, is some invention. Even Mosaic testimony confirms this, showing us the expiation of a leprous house by prophetic inspiration.

But I fear the soil heaped upon it, and packed down by stones, might not prevent martial stench. If it does escape, it will infect the poor and needy, more vulnerable to pestilence, rather than the city's ruler himself, who perhaps resides in some suburban villa. I believe he will not perish by the sword, especially if that villa is several miles distant from the city. It is too far for the martial vapour, already smothered in lime, rubble, and debris, to reach intact and effectively.

Yet this is a matter for philosophers to test. Plato's Academy and Aristotle gave so much advice about founding and happily governing a city-state, but left nothing written about such a useful and noteworthy precaution.

If we consider all these things seriously, and not as a joke, we see it is with good reason that Haly Avenrodan, the interpreter of Ptolemy, great in his art, deemed the part of astrology dealing with elections frivolous and ineffective.

Chapter Eight

Astrologers try to subject our mind to the heavens, although, as they are clever, they attempt to conceal it.

Thus far, we have demonstrated that nothing among corporeal and temporal things (over which the heavens are thought to have the greatest authority) depends on the heavens in the manner astrologers claim. Neither chance things, nor those that pertain to others, nor those that are either past or will occur long into the future, nor even the greater part of those events thought to occur favourably based on specific observations of hours, are determined by the heavens.

If the stars do not determine things that can be foreseen from the heavens, how much less do they determine incorporeal things, about which, astrological superstition still has no shame in making pronouncements.

This includes the diversity of character and temperament, and all the actions and qualities of our soul. It also includes matters pertaining to demons, higher intelligences, God, the efficacy of prayers, the secrets of conscience, the state of the afterlife, and other such topics. Concerning all these, frivolous people arrogantly and recklessly disseminate countless doctrines of prediction.

I would begin with character, which they believe differs among individuals according to the natal constellation. However, when pressed on this matter, astrologers are accustomed to conceal their true opinions. They offer lengthy discussions about the freedom of the will, and cautiously advise that we should not think our freedom is compelled by the stars, which they say only provide some inclination or enticement. It is something that remains within our choice either to follow or to avoid.

I shall first expose the deceit of this defence, presenting numerous astrological doctrines where they subject the mind to the governance of the heavens, even when it does not depend on the body. Thereafter, I will demonstrate that the diversity of character and temperament cannot, even in the manner they claim, be attributed to celestial causes.

Suppose they believe the differences of the human soul arise from the disposition and position of the stars only insofar as the body is affected differently, and thereby the operation of the soul is also altered. How then do they assert that, with Mars being fortunately positioned in the ninth house, so much can be accomplished that we might expel demons from possessed bodies by his mere presence? This pertains not only to the soul inclining towards the body, but to the one living in the body. That which is filled with God and dwells in the innermost sanctuaries of the mind, and does not perceive itself as living in the body.

How do they also presume to judge, based on the position of the Sun at birth, the secrets of the conscience, and someone's disposition towards gods and men? Matters which are placed in the hand of the soul and in our liberty? Matters neither open to the cognition of angels, nor subject to their power? If the soul is connected to the heavens by its association with the body, how do they pronounce on the soul's state when it is placed outside the body, based on a celestial constellation?

It is well-known among astrologers that two planets are the authors of happiness: Venus and Jupiter, though with differing roles. Venus bestows the happiness of the present

life, while Jupiter grants that of the future. Maternus, after recounting many things provided by Saturn when positioned in Leo, then adds as follows: “But when they have achieved all these things, they will die at a great age, and their soul, united with the gods, will pass into the heavens. For Saturn, positioned in Leo, recalls the souls of those who have so conducted themselves on earth, souls liberated from countless hardships, back to the heavens and to the beginnings of their origin.”

Thus speaks Maternus. From this, one sees how far astrological superstition spreads, even to the suspicion of impiety. One also sees how much trust can be placed in the writings of astrological authors, as if they only covered material tested and verified by experience. However, we know for certain that when they were writing, these authors could not have had any experience of future life. If they learned from their deceased colleagues, they would more easily understand what constellations send souls to the underworld than to the heavens.

Astrologers think they can obtain whatever they desire from God by praying at a specific hour. I hardly believe, unless they have changed their doctrine, that they could obtain eternal happiness from Him. They indeed believe this nonsense. The most fabulous of them, Albumasar, writes that one who prays to God when the Moon is conjoined with Jupiter and the Head of the Dragon [Draco] will obtain whatever they request.

Are there still philosophers, are there still theologians, who are pleased by these ideas? Who think that they, and the astrologers they follow, understand what God is and what prayer is? This madness, in my view, is less suited to refutation than to execration, especially since we elsewhere argue against the impious on the matter of prayer.

Pietro d’Abano, whose writings embody Heraclitus’ dictum “Much learning does not teach understanding,” declares that at Albumasar’s designated hour, he sought knowledge from God and, after that day, advanced greatly in it.

As for how much this new Solomon advanced in knowledge, I have no time to measure. I believe that whatever progress he made does not exceed what can be achieved by human effort. Whatever the case, I advise this Pietro that he attribute his gains to his own diligence and intellect, rather than to his prayer to Jupiter. But lest he stubbornly defend this claim, let fair judges deny he made any progress in worthwhile scholarship, before they ever assent to such vain superstition

I would also suggest to astrologers that, since Jupiter is so favourable, they should obtain wealth and riches for themselves with a single supplication during a fortunate hour, so they no longer need our money. Thus they might finally stop deceiving the unlearned with their daily lies, for the sake of extracting coin from purses.

Chapter Nine

The character of men is not fashioned by the heavens.

Let us consider human character, and whether reason can justify the notion that it too might have cause in the heavens. If neither the rational part of the soul suffers force from the heavens, nor our freedom suffers coercion, perhaps neither philosophy or piety could deny that the varied pursuits of men, and their manifold characters, might arise from different influences of the stars. Just as the condition of the body does so, without harming the dignity and freedom of the soul's choice.

But whoever thinks this is greatly mistaken. Even the sensual part of the soul being affected by the Sun so as to incline towards some crime is contrary to reason and gravely opposed to piety. For whatever arises from natural causes, especially those that unchangeably follow the laws prescribed by the Creator, must be referred both to the author of nature, and

to nature itself. Whatever virtue or property the stars are endowed with, by the consensus of philosophers and theologians God instilled it as the principle of nature.

The greatest fool cannot deny that God is the best and wisest. What sort of goodness or wisdom bends man, a creature free yet weak, towards criminality, by the most powerful hand of heaven? That turns divine servants into authors and agents of evils, so that, although they themselves never transgress the commands of the king, they invite and drive others to transgression? What is this order of nature, this harmony, this wise arrangement? Nature does not want something to happen, and yet it diligently arranges it to happen by the greatest, most powerful, best, and principal parts of itself? Furthermore, the sinner does not do something, but rather fails. The one who invites to sin invites to failing, which does not befit higher causes, which always act and never fail.

Astrologers who think we derive an inclination towards theft from a particular position of the stars, towards incest from another, or fraud, or murder… their doctrine is most absurd. The whole of nature, especially the higher part that is most closely joined to the divine mind, can support the observation of natural and divine law, but can in no way hinder or oppose it. Let astrologers, therefore, restrain their profane speech. Let them not say that Venus in conjunction with Mars calls us to adultery, nor that these same planets, placed in masculine signs, incite us to unnatural intercourse with men. Nor let them claim that Mars occupying the ninth house makes us irreligious, or that other constellations provoke us to other crimes. Let astrologers attribute their sins to themselves, not to the heavens. Nor let them think the filth of corrupt matter, and the stains of an unjust mind, flow from the purest sources of nature.

Perhaps this objection might be resolved if (as some believe) the powers of all the stars are good and beneficial, but when received in us, this power degenerates due to the fault of matter. Beneficial influences accordingly become harmful and malevolent. Thus, Mars

provides strength of spirit and Herculean vigour, but either due to a fault in the body (in which an excess of red bile boils over), or through the fault of the mind misusing the celestial gift, those impulses are sometimes turned towards cruelty and injustice.

In the same way, Saturn grants loftiness of mind, depth of counsel, perceptiveness of hidden things, and love of contemplation; yet because Saturnine powers find a sluggish receptacle or because of the fault of the free will, these make the mind deceitful, sordid, uncultured, superstitious, and imaginative to the point of madness. Similarly, from Venus, we become inclined to cheerfulness, benevolence, and refined civility; but we misuse this impulse for depravity, luxury, and immorality. We are stirred by the Sun towards magnanimity, but we abuse that impulse for ambition. So it is with the rest.

Someone might say this more as a defender of astrology than as an astrologer themselves. For among the sayings of astrologers, the foremost and most widely acknowledged is that some planets are benevolent, others malevolent. But if what is said here were true, all planets would equally be called benevolent by their nature, and all equally malevolent for the same reason. There is no influence so beneficial that the matter and condition of the recipient cannot corrupt, alter, or disturb it.

But even if astrologers do not claim a planet is so malevolent that great positives cannot also come from it, nor so benevolent that great evils cannot arise from it, they nevertheless attribute diversity in outcomes not to the matter or receptivity of the recipient of the rays, but rather to the varied position and state of the same star in the heavens.

Therefore, they say that Saturn, if it occupies its own house, its own exaltation, its proper boundaries, if it is combined with favourable radiations, and if it is a diurnal nativity, produces contemplative, pious, and wise individuals. But if it is poorly placed, conjoined with Mars, or in adverse configurations with the Sun, it produces demoniacs, sordid, envious, and deceitful people. Astrologers argue that when Saturn is positioned in the heavens in such

a way, no good can ever be expected from it. Therefore, whoever defends astrology in this way plainly does not understand what they are defending.

What we have said about Saturn is to be understood of all planets. Astrologers are accustomed to say that Mars, when unfavourably positioned, incites ambition, weakness, and the lust for tyranny. Not because the vital spirit grows excessively hot or cold, and thereby renders the celestial fire either sluggish or voracious, but because Saturn, Mars, and the Sun, when positioned in the heavens in such a manner, produce evils from their nature and properties. This is what astrologers write and believe about a nativity.

Someone who denies this defends astrology like one who amends a book with a sponge, for they remove both the doctrine and the truth of all prediction. If celestial influence does not depend on observation, and if the disposition of matter not only diminishes or increases celestial influence but entirely alters and transforms it, all truth of prediction is lost.

Chapter Ten

Bad religions, and likewise good ones, are not subject to the heavens.

Here we refute those who deny good laws are subject to the heavens, because they depend on divine virtue, but we admit it for bad ones, since there is nothing in them that transcends the forces and capacity of nature. Just as the loftiness of error prevents good things from being subjected to corporeal causes, so too does the depravity of bad things prevent them from being attributed to the best causes, which are most obedient to the supreme God.

The rise of both good and bad religions does not depend on the heavens, a fact sufficiently demonstrated by experience. Some attribute the origin and diversity of religions to the stars, which they believe dominate cities and provinces with a certain rightful power.

Others attribute it to the great conjunctions of the superior planets, especially Saturn and Jupiter. The Arabs and the Latins (following the Arabs) hold this opinion.

Ptolemy appears not to make any mention whatsoever of these great conjunctions. But in the second book of the *Apotelesmata*, he says that the regions of Asia facing east and south worship Venus and Saturn because they are under the influence of the dry triplicity, namely Virgo, Taurus, and Capricorn, over which he believes Saturn and Venus rule. Those who dwell between the south and west regard Venus and Mars as deities, since they are subject to the watery triplicity, for which he assigns Mercury and Venus along with Mars.

Both opinions are refuted by the obvious nature of reality and actual events. If some religion arises from the influence of a great conjunction, when that influence ceases, the religion ought to die also. However, even astrologers do not believe there is a conjunction of the stars whose power lasts as many years as idolatrous cults, the Mosaic religion, or even Christianity have endured.

The worship of idols darkened the world for around fifty centuries. What conjunction, what great cycle of some star, lays claim to such a vast number of years? The rites and observances of the Mosaic law among the Hebrews flourish even today. They have thrived for three thousand years or more. What constellation is so powerful, so enduring, that, even with the fall of an Empire, it does not allow the religion to be extinguished?

A theologian will provide causes for these things – true causes, and ones consistent with his doctrine – but an astrologer can offer none derived from the heavens. Therefore, if diversity of religions arose from celestial influences, we would see their rise and fall more frequently. Even astrologers themselves, following the principles of their own science, have set boundaries for each religion. These having been surpassed, the very facts themselves have been shown to depend on something other than the stars.

Ptolemy's opinion, that just as various stars dominate various places and peoples, so too different religious rites arise in different regions, is thoroughly refuted by direct experience. Even in those provinces lying between the east and south, where the same stars that once governed still preside, Venus and Saturn are no longer worshipped as they were in former times. Why, then, did particular deities rule over those places? As Ptolemy himself writes, it was because the terrestrial triplicity, Taurus, Virgo, and Capricorn, governs those regions, and that triplicity was ruled by Venus and Saturn. But this division of the world and its regions, distributed under different triplicities, is perpetual, not temporary. Therefore, it must always remain as it once was. Why, then, O Ptolemy, does the same religion no longer endure today in those same places?

Finally, let us conclude this argument by questioning Ptolemy himself. Suppose in ancient times, different deities were worshipped under the varying dominion of the stars in different nations. By which star's power and influence have we arrived at a situation whereby stars are worshipped in vanishingly few regions of the entire world?

Chapter Eleven

Bodily dispositions are not caused by the heavens.

If all these things are refuted, only the disposition of the body remains. Astrologers can decide if this is of those things caused by the heavens.

But the natal constellation cannot cause bodily disposition, since both the form and the shape of the body are present before the child exits the womb. This is one of those things we mentioned in the fifth chapter, since it cannot be predicted by the nativity charts astrologers use. It precedes the nativity; hence the cause should rather be through conception

or the disposition of the seed. But the seed is not made then. Therefore, astrologers should consider the constellation under which the seed was made. But this will be discussed later.

If, therefore, the body's disposition can be foreseen and predicted, it surely must be from the hour of conception, rather than from the hour of nativity. But whether it can even be predicted from that will be examined in the following books.

So astrologers err when they pronounce that someone is born with a shorter body, or tall, or fat, or lean, or strong, or weak, or maimed, or whole, or legitimate, or monstrous, because of the hour of the birth chart.

For indeed, he acquires all these conditions long before. Already fully formed and complete, he is brought forth from his mother's womb into the world. Therefore, just as these things do not arise from the natal constellation (which preceded them by some time), so neither can they be predicted by an astrologer from that constellation. We will discuss the time of conception later. For now, we want the reader to know this: the greatest astrologers believed the body's temperament heavily depends on proximate causes and those beneath the heavens. Haly Avenrodan writes that astrologers ask for indulgence if, in predicting the body's disposition, they fall short of the truth.

Let us therefore summarise this entire discussion as follows: if the heavens are a universal cause, the variety and distinction of particular things do not arise from it. If there are powers in the heavens capable of producing particular properties, they are not of the kind astrologers claim. Accidental events cannot have natural causes, nor can evil be attributed to the best of agents, nor can things originating from reason and deliberation be attributed to causes acting by natural necessity. Nor can incorporeal influences act upon bodies, nor can past events or those that will happen long after be related to present constellations, nor can things concerning others be referred to our nativity in any reasonable way.

It is thus utterly absurd, and most contrary to all philosophy, to seek the origin of things whose proper, evident, and sufficient causes are clearly present among us, and yet to attribute their origin to the stars, where it neither resides nor could reside. Nor does the nature and condition of the heavens as an efficient cause allow it. The relevant causes are instead the powers of lower bodies, in the diversity of minds, in emotions, intentions, circumstances, habits, and the varied convergence of countless events.

Philosophers, whose study and effort revolve around investigating the causes of things, borrow true causes from medicine, mathematics, and every art and science, but never make use of astrological causes. Never mind Favorinus, Carneades, Posidonius, Timaeus, and Pythagoras, we have demonstrated at the beginning of this work that Aristotle, Plato, Plotinus, Averroes, and Avicenna, along with their worthy followers from both the Platonic and Peripatetic schools, refrain from invoking causes among the stars.

Chapter Twelve

The heavens cannot be a sign of something for which they are not the cause.

Someone might say that even if celestial bodies do not cause these twists and turns in human affairs, it does not immediately follow that these matters cannot be foreseen and predicted by the heavens, since stars can still signify and portend them, even if they do not create them. Some indeed believe that, while celestial powers only influence lower things in matters of general causality, events that depend on closer and proper causes can nevertheless be indicated by the heavens before they occur. Thus the future may be known through the transit, station, or retrogression of planets, just as birds, whether by flying or standing still, unknowingly signify future things through their wings or their voice.

However, renowned astrologers never believed this, nor does any rational argument compel us to believe it. When something is a natural sign of an event, not a sign established by human convention, it is either the body or the cause of the thing it signifies. Or it is its effect. Or both the sign and the thing signified proceed from the same cause.

If someone thinks something should be added as if distinct from what we have said (that it is necessarily and inseparably connected to a cause), they are greatly and utterly mistaken. Such a connection and accompaniment can only occur in one of two ways. Either the cause produces it from itself before bringing about anything else. Or because it simultaneously excites both the cause and what it causes into action, in which case both can be referred to a common cause.

Let us now consider which of these possibilities is more fitting for the heavens, if they are to signify future events. The motions and arrangements of the heavens are not the effects of lower things, nor are they their causes. It follows that the condition and configuration of the heavens, along with what is signified by them, must arise from the same cause. Just as the rainbow sometimes portends clear weather – not because it creates clear weather, but because the same cause that produces the rainbow also brings about clear skies.

However, no corporeal cause superior to the heavens can be recognised as producing both heavenly and earthly dispositions simultaneously. Therefore, the remaining alternative must be that the cause is incorporeal.

It may perhaps seem possible that human events are caused by the divine minds that move the heavenly bodies. As events unfold, they are signified to us by the very configuration and position of the heavens, which the divine minds move as though with definite gestures or signals. However, anyone who claims this faces a difficulty akin to the fables of the poets. How will they avoid the implication that divine minds are responsible for

actions that humans themselves would not commit without guilt or crime, such as urging one person to murder, another to adultery, and yet another to theft?

I leave aside for the moment the universal philosophical rejection of the idea that corporeal effects can arise from incorporeal causes without the mediation of a corporeal intermediary. Furthermore, why are different fates assigned to individuals born at different hours, if it is not the position of the heavens, changing hour by hour, but rather an immovable and unchanging heavenly author, always constant and like itself, that is considered the cause and source of fate?

As St Thomas Aquinas argues, the effects of the same cause indicate each other, so they must proceed from the same principle and in the same manner. However, the movements of the heavens and the dispositions of earthly bodies do not arise from superior causes in the same way. Heavenly movements occur with immutable and necessary order, while earthly things follow a variable order, subject to contingency, according to the nature of the things being moved and governed. Divine principles do not alter this nature but preserve it. Otherwise, they would not compel nature but destroy it.

Therefore, the heavens cannot signify earthly matters, unless as a cause that indicates its effect. Consequently, those who claim the heavens are not the cause yet insist that they are a sign, speak without understanding. This is also affirmed by St Thomas, a man of the most profound and sober judgement, who was never accustomed to making rash assertions, in his *Summa Theologica*.

Perhaps this view might apply to comets, shooting stars, and other such phenomena, which occur in the upper atmosphere, as if aroused by the stars. Being the efficient cause of some effect, they do not themselves act but rather signify what their cause will produce. However, this cannot be said of the stars themselves, since as we have already noted, there is no corporeal cause superior to them.

Furthermore, those holding such opinions inadvertently introduce the necessity of fate, because if the stars are the causes of earthly things, it is possible that what is intended to occur through their influence may not be accomplished. Either because of resistance from matter or because a particular cause diverts the general influence elsewhere. If, however, the stars are signs, and they were established by their nature to signify, their true nature will also make their signification true. Otherwise, why would they have been instituted by God for the purpose of signifying? Since God's works are perfect, how could they deceive or lie? And if they do not lie, then whatever they signify as the future will necessarily come to pass.

If stars are causes, it is not contrary to their nature to belong to that order of causes which may be obstructed, altered, or overcome. But if they are signs, they cannot be reckoned as falsehoods. Otherwise, the one who inscribes in the celestial volume, as they say, the marks and letters of future events would be either deceitful or ignorant.

Finally, if the heavens do not signify by causing, but rather indicate something they do not themselves cause, it follows that what is done by other causes is indicated by them. Either they signify what all causes produce, or only the effects of some. If they signify only what some causes produce, why do they indicate the works of certain causes but not others? If they signify the works of all causes equally, there will be no causes by which the occurrence of an event could be prevented. Therefore, what is foretold must necessarily happen.

But this would run counter to the truth, as we have demonstrated elsewhere, and even to the writings of the astrologers themselves. The Egyptians, Ptolemy, and every renowned astrologer always denied the necessity of fate. This is especially clear in their discussions of particular questions, where they declare that not all questions are legitimate, but only those arising from impulses moved by celestial influence. Since they concede that many questions do not originate in such impulses, but rather from reason and deliberation, they reject the necessity of fate. If fate were admitted, the entire utility of astrology would be lost, since

astrology's primary benefit lies in the ability to foresee evils and avoid them, as well as to strengthen and increase good fortune.

Moreover, if the stars are signs rather than causes of inferior things, the branch of astrology commonly called 'elections' would be eliminated altogether, since it concerns celestial favour for achieving outcomes rather than mere signs for curious investigation.

Chapter Thirteen

Whether the stars are signs or causes, the branch of astrology that deals with horary questions is of no substance at all.

However strongly astrologers favour either opinion – that the stars are causes of terrestrial things or merely signs, not causes – the branch of astrology dealing with horary questions, which they most frequently practice, is entirely invalid.

The foundation of this branch is the belief that our minds are moved by celestial configurations, at least through the power of imagination. When the mind is stirred by this influence into a desire to know, if an astrologer is consulted, the configuration of the heavens at the hour of consultation is believed to indicate what pertains to the inquiry. Therefore, astrologers claim to provide truthful answers in response to any question posed. Let us ask those who claim to solve every question whether the stars are merely signs of earthly events or whether they are also causes, signifying by producing effects.

If the stars are merely signs, our desire to know does not originate from them. Just as other things occur through their own proper causes, even though they may be indicated by the stars, so the movement of desire will derive its origin and cause from elsewhere. Not from a celestial configuration, but from the power of imagination itself, from our own choice, from the soul's desiring power, and from external things that provoke the senses and the mind.

If, on the other hand, astrologers respond that the stars are causes and that lower things are signified through them, in the manner that effects are demonstrated from causes… how can the celestial configuration at the hour of consultation be the cause of those matters about which the astrologer provides answers? Since some events have already happened or will never occur, they can have no cause from the configuration at the time of questioning.

Indeed, Mars will be in the west, which will not allow astrologers to give truthful answers. But if they could obtain from it the power to hear the truth, I would answer – even to those who do not ask – that I will declare true things about these questions.

Astrologers suffered discontent, with too little glory, and so they sought greater profit. It was insufficient for them to pronounce fates only from the time of birth, or by the revolution of the year. Consultation was done either once in a lifetime or at most yearly. Moreover, curiosity daily desired to know things, and astrologers could provide no answers, so this diminished the prestige of their art among the unlearned, and ate into the money earned by practitioners.

So they persuaded themselves, or at least others, that they were able to foresee clearly whatever would be asked from the hour of the question. The condition, however, was that the inquirer must be moved by natural impulse rather than by deliberate choice. This nicely exonerated the astrologers from any accusation of falsehood. For if what they predicted was contradicted by reality, the fault did not lie with the astrologer but with the ineffectiveness of the question. If their answers coincided with the events, what then could prevent them from being considered true oracles on earth?

By these tricks and deceits, this trifling breed of men mock the ignorant. Nothing could be more contrary to reason, whether spoken or thought, than this fraudulent practice. Even if my desire to know about an absent person – for example, how that person is doing – comes from a celestial influence, what connection can there be, such that the very moment I

express this desire to an astrologer, it aligns with a configuration of the heavens capable of revealing the condition of the absent person? What correspondence or bond exists between our desire and the thing we wish to know? If, perhaps, the astrologers argue that the same celestial force which causes that distant event also stirs our mind, nudging us and warning us, then it would follow that such desires only arise when the event itself is occurring. Yet astrologers believe questions can be asked not only about matters of long ago, or that will happen far in the future, but even about those that will never happen.

Moreover, it is not the configuration of the heavens at the hour we consult the astrologer that should be observed, but rather the exact moment when the desire to ask the question first arises within us. Since it is supposedly the same or a similar constellation that both produces the event and stirs in us the desire to know. If we were to indulge in this madness rationally, this conclusion would be far more reasonable than the astrologers' claim about observing the heavens at the time of questioning.

As we have said, if there could be any relationship or harmony between these things, it would only exist between the event and our desire, which might somehow be related to the same or a similar constellation. The hour at which we consult the astrologer can vary for countless reasons – whether we arrive sooner or later depends on factors such as the distance of the astrologer's house, whether someone delays us on the road, or other random incidents that affect the time of questioning and thus alter the celestial configuration upon which the astrologer bases his response.

But astrologers pay no heed to such matters, having long grown accustomed to saying and believing nonsense that lacks any foundation or reason whatsoever.

Chapter Fourteen

Divine miracles are neither brought about nor signified by the heavens. Rather miracles are indicated by miracles, just as natural events are indicated by natural causes.

If only they had limited their madness to this extent, and did not believe that divine miracles, those surpassing the entire power of nature, are caused by the natural rays of the heavenly bodies!

We have already shown their error. Astrologers attribute divine religion itself to the power of the stars – the very religion God revealed to the Hebrew people through Moses and later to the world through Christ and the apostles. But more: they also ascribe the deluge that overwhelmed the entire world in Noah's time, along with other divine miracles recorded in sacred history, to celestial constellations. In this, they are undoubtedly more insane than those who outright deny such events ever happened, for they believe that these things occurred as described and that they were brought about by natural causes. No greater madness can be conceived than believing something beyond nature's power could be accomplished by nature's forces.

Furthermore, we have proven in debates against the impious that divine law is evidenced by things that exceed natural powers. The universal flood can likewise be demonstrated as such a case, for nothing could be more contrary to nature than the idea that it would engineer its own destruction.

Nature would never inflict an injury upon itself from which it could not defend itself by its own power. If it was not naturally possible for Noah, along with his family and every kind of animal, to survive that cataclysm for twelve months enclosed in a single ark while the waters rose fifteen cubits above the highest mountain peaks, it was certainly not nature's purpose to bring about the destruction of all living things by flooding the entire earth. If such

things do not come from the heavens, they cannot be foreseen by the heavens either; for, as we demonstrated earlier, the heavens do not signify what they do not cause.

We may concede that the heavens can cause or indicate events that do not exceed the power of nature, but these miraculous occurrences are governed by their own particular reason, and are not portended by the stars. There is a distinction between the order of things established by God according to the natural course and those things that happen beyond nature by divine power and will. The boundaries of nature are set apart from divine action, such that if all supernatural events were removed, nothing would be lacking or excessive in nature itself. The heavens, along with all occurrences within them, belong entirely to the realm of natural law.

If the movements or configurations of the stars, which arise from their natural properties, signify anything about future events, that signification must be regarded and classified among natural phenomena. If we claim that any of these signs portend events that occur beyond nature, it follows by absurd consequence that, if God leaves nature to its own conditions and does nothing beyond it, nature itself would be found false and deceptive. In this case, God would have established something vain and superfluous within nature. There would still remain signs of future events in the stars, even though those events would not actually come to pass, since they would be supernatural things that we supposed had been excluded.

The signs themselves are things within nature. If all supernatural phenomena are removed, the signs must neither be taken away nor deprived of their inherent perfection. Thus, they belong to the realm of nature and must not be confused with events or effects that transcend the natural order.

If God decides from eternity to perform some miracle, He does not embed signs of that miracle into natural things so its signification would belong to the nature of those things.

Rather, He chooses to signify natural events with natural signs and to indicate miracles by miracles preceding them. Divinely inspired and divinely protected, Noah foretold to the world the coming of the flood as a miracle of divine justice. The miracles performed by Moses with the divine rod, witnessed even by the astrologers of Egypt, testified that the Hebrews would be led out of Egypt and given the Law. The promise that the land would be subdued by God's people, and the wonders God would work there beyond the laws of nature, were not signalled by any natural configuration of the heavens, but by the miraculous halting of the swift motion of the Sun.

I will pass over the crossing of the Jordan and the fall of Jericho's walls at the sound of trumpets, but consider that Hezekiah's life was prolonged by divine power. Not by the favourable influence of Jupiter's rays following their usual course, but by the miraculous retrogression of the Sun.

The miracles of the Word made flesh and the Virgin's childbirth were proclaimed by oracles divinely inspired beyond the nature of human minds. At the same time, a thousand wonders testified to it in the heavens and among earthly bodies. The immense new star arose for the Lord's birth, and later, when He hung upon the Cross, the Sun darkened, and the full moon, contrary to the order of nature, was eclipsed. By these signs, divine miracles are both demonstrated and confirmed – miracles cannot occur according to the natural order of things, and ought not to be signified by it.

Chapter Fifteen

The star of the Magi cannot be understood as any astrological configuration. An explanation is provided for certain passages of Scripture that might seem, to the unlearned, to support astrology.

Regarding the star that revealed the birth of Jesus to the Magi, it would not be out of place to remind the reader that this star does not favour the opinion of astrologers. This was not merely a celestial constellation that indicated the birth of a prophet, known and studied by those in the East highly skilled in celestial science.

The very text of the Gospel, speaking about this star, clearly leads us away from error when it says: “And behold, the star they had seen in the East went before them until it stood over the place of the child.”

No one, unless insane, would think this refers to the stars and configurations of the heavens. This star was artificial and temporary, not perpetual and natural, created by the Creator for the purpose of signifying the birth of the King of the Jews. Perhaps the Magi understood it in the same manner by which they were later warned in dreams to avoid Herod and to return to their country by a different route.

Likewise, care must be taken not to be disturbed by certain expressions in Scripture, such as when St Paul writes that the Son of God was sent “in the fullness of time,” or when the Lord says in the Gospel, “This is your hour and the power of darkness,” or elsewhere, “My hour has not yet come.” A superstitious person might believe these refer to the constellations of hours and times. But ask him whether, when he grows hungry, he thinks it is the right time to eat, whatever the configuration of the heavens may be at that moment. Or when his body is sufficiently tired, it is time for rest. Or when he has slept enough, it is time to awaken.

Suppose he claims all things have their proper time, not according to the constellations of that time but according to the nature of the action itself and the occasion and opportunity for doing it. It then follows that those things which God does beyond nature and those which men accomplish by their own free will (though they require no specific

constellations to occur) must happen at some definite time, with one time more fitting and another more convenient.

It was fitting that the Son of God be sent at the time when He was sent; it was not fitting before then. The cause was not in the heavens, but in the divine purpose and the needs of the world, as many theologians have written, as far as they can penetrate the divine counsel through Scripture. Likewise, it was fitting that after His birth, He should not be killed immediately, but rather when the power of darkness found it expedient. The same applies to other events, as demonstrated in the Book of Genesis. God promises Abraham the land of promise – named for its purpose – and says: "Know that your descendants will be strangers in a land not their own. They will be oppressed for four hundred years, but in the fourth generation, they will return here."

If the discussion had ended there, the astrologer would scoff, and claim the divine promise could not have been fulfilled until so many years had passed and the heavens had aligned in a particular configuration. But observe what the prophet, speaking in the person of God, adds: "For the iniquity of the Amorites is not yet complete."

Consider what was awaited. Not a conjunction of Jupiter and Saturn, nor any other stellar configuration, but rather the fullness of the Amorites' iniquity. Divine justice, by whose laws human affairs are governed – not fatal necessity – recognised this moral ripeness as reason to drive out the Amorites and return the faithful seed of Abraham to the land.

Chapter Sixteen

Those forces that surpass the powers of nature, even in relation to what is contained naturally within themselves, cannot be signified by the heavens.

We have sufficiently demonstrated that divine miracles are neither made by the heavens nor signified by them. As far as their causality is concerned, this is indicated by the voices themselves, and does not require further proof. However, very recently, Girolamo Benivieni, a man of sharp intellect and insight, asked whether, in matters that transcend nature, there might sometimes be something natural as well, and whether this could be signified by the stars.

For example, no constellation could indicate the Incarnation of God. Might it still be possible for the stars to foretell a lawgiver, a man who would promulgate good laws? I replied that such things could not be signified by the stars in this way. Nor, as Pierre d'Ailly thought, could this occur through them.

D'Ailly thought this suggestion impious in a sense, in that it seeks the causes of the marvellous and divine in the stars. But while it imagines these things depending on the heavens, this is not because they are above nature, but only because they contain something natural.

Alas, he who says this says nothing. Like saying a man is made by a certain constellation, yet not claiming the rational nature is made by it – if a cause does not produce what is rational in a man, there is no reason it makes a man rather than a lion. If you remove from divine miracles what is proper to them and leave only what they share with innumerable things, there is no reason to seek out a singular cause in the heavens for such effects. Those who investigate the genesis of Jesus do not concern themselves with why He was in the womb for nine months, just as other men are; why He had a good physical constitution; why He had long hair; why He was poor; why He was Jewish; since these conditions abound in all human life.

But those things that were outstanding and singular in Him – these are the causes men seek most eagerly in the stars, believing them unique and extraordinary. Yet these are the

works of God above nature, not the heavens' works: that He was born of a virgin, that He was both man and God, that He was a master in His homeland but a stranger in the flesh, that He was the doer of marvellous works, that He was rightfully the Lord, the judge of the living and the dead, the giver and steward of divine grace, the banisher of idolatry, the conqueror of demons, the source of virtues, the destroyer of vices, the peace of the world, and the revealer of truth.

Thus the refuge d'Ailly offers astrologers – that divine miracles are caused by the heavens, though not insofar as they are miracles – provides no true shelter. Miracles cannot be signified by the stars, as Benivieni questioned, since if the things proceeding from God beyond nature were removed, celestial signs would still remain, purportedly pointing towards some partial outcome. But no true effect would remain, and these signs would thus be empty and deceptive – something we have shown as impossible given celestial nature.

Here ends the fourth book of Giovanni Pico della Mirandola's Disputations Against Divinatory Astrology.

Disputations Against Divinatory Astrology

By Giovanni Pico della Mirandola, Count of Concordia

Book Five

Chapter One

The decrees of astrologers concerning great conjunctions are refuted, and those who wish to judge great changes in inferior things by such conjunctions are found to be deceitful.

Many are led away from truth by the deception of astrologers, who persuade the unlearned that there has never been any change of religious laws, no coming of prophets, no remarkable event in human affairs, which was not preceded by some great conjunction of the higher stars, especially Saturn and Jupiter. When they discuss it either in person or in writings, running through thousands of years, they say: "This is the constellation that caused the Flood; this brought forth Moses; that indicated the coming of Jesus; this preceded the law of Muhammad."

There is scarcely anyone who is not moved by such claims and either compelled to agree with their opinion or at least forced to doubt. Since the astrological profession greatly harms religion in this respect, I wish to confront this plague before we overturn the entire foundation of the art itself. Astrologers err so greatly in this matter that even if they were right in other things, they could not be defended here – not only because they predict things not subject to the heavens, but also because the very rules they use in making predictions contain obvious errors, both in history and in astrology.

Before we rationally demonstrate this, experience makes it sufficiently clear to those who perceive the force of reasoning less keenly. All who have wished to divine the change or

success of sects and laws from constellations have been found to be false and deceitful. Long ago, the mathematicians, when the faith of Christ began to flourish, declared that it would last no more than … years, yet from its beginning, the one thousand four hundred and ninety fourth year is already unfolding.

Albumasar, either the author or inventor of this error, declared that the same law, meaning Christianity, would last until 1460, since that is the number of years they call the greatest years of the Sun. 1460 has come and gone, yet Christianity itself has not passed away, because though the heavens and earth perish, the words of the Lord shall not. Nor did Albumasar make more truthful predictions concerning his own religion, that of Muhammad. Meanwhile, Abraham the Jew declared that the Messiah would come in *Anno Domini* 1464, based on astrological observation, because the position of the stars would first return to that under which Moses led his people out of Egypt and gave the law to those he led.

I, born the year before 1464, have attained my thirtieth year, and have learned from experience the falsity of that prediction. Arnaldus de Villa Nova, a noble physician but too inclined towards astrological vanity, along with many other predictions, threatened us with the Antichrist in the year 1345. Since then, one hundred and forty-eight years have passed, and there is still no Antichrist, except those of the kind that existed in the time of the Apostles. How often have younger astrologers announced the coming of a false prophet from some conjunction of the superior planets! They especially derive predictions from the conjunction of Jupiter and Saturn in Scorpio that occurred ten years ago – and yet no false prophet has appeared to the world since then, except for those already mentioned.

Pierre d'Ailly himself writes that in the year of the Council of Constance, astrologers predicted there would be no peace in the Church, but rather dissensions and the ruin of religion, as indicated by Jupiter retrograding in the first house in the figure of the year. And yet a terrible schism – greater and longer-lasting than any other in the Church, lasting for

forty years – was ended at the Council, with peace and tranquillity restored to the Church. This might have been enough to dissuade d'Ailly from further trust in this vanity, as he too feared the schism would soon foist the Antichrist upon us.

I could recount other predictions about religion and sects, all of which were refuted by actual events. But I believe these examples suffice, since there are no other writers held in as great authority as these among astrologers, and we have demonstrated that their predictions were disproven by experience itself. Now, let us proceed to arguments deriving from reason.

Chapter Two

The manner in which astrologers pass judgement on greater matters. The refutation of great orbits.

Astrologers investigate major changes in inferior things through four main methods. Through the superior planets, especially Jupiter and Saturn, when they are together, which astrologers call a great conjunction. Through great orbits. Through Saturnian revolutions. Through the approach and recession of the eighth orbit.

We will show all these are irrational and false. We will not only demonstrate that the falsehoods astrologers publish with impious recklessness regarding religion and laws are wrong, but also weaken judgement about major changes in the world.

I will begin with the refutation of the great orbits and the revolutions they call Saturnian. Once these are rejected as useless, the discussion of the present book can freely unfold against great conjunctions.

Astrologers imagine each of the planets, and likewise each of the signs, holds dominion for three hundred and sixty years, at the end of which a new great orbit begins. The planet previously nearest, and the sign which follows, in turn have authority over this great

orbit. Such things happen in that span of years as befits the nature of the ruling sign and star, and when a new orbit begins, many things change in inferior matters. According to the nature of the ruler, the condition of our affairs is always altered. Thus if anyone asks the astrologers where we are, or under which ruler we now live, they will respond under Leo and the Moon.

Omar writes in the book *On Nativities* that a new great orbit began with the conjunction of Jupiter and Saturn, which supposedly foretold the Flood. But this preceded the Flood by two hundred and seventy-nine years; and with regard to this orbit, Omar says, Saturn was the ruler among the planets, and Cancer among the signs. This is also stated by Albumasar in the first book of *On Great Conjunctions*.

Assuming these as the pivot points of the entire calculation, they conclude, based on the number of years provided, that the Lord Jesus was born one hundred and forty-one years into the fifteenth orbit from that when the Flood occurred. Our present great orbit is ruled by Leo among the signs and by the Moon among the planets, and will end in the year 1650.

This is the opinion of the astrologers. You will not see anyone, in public predictions of years, who does not establish Leo and the Moon as the rulers and governors of the world, if they mention great orbits.

How lightly they are moved by conjecture, that they would call the great orbit the span of as many years as there are degrees in the sky. How could the power of the world's governance last so many years under one planet, especially an inferior planet? Neither Ptolemy nor the ancients ever imagined such a thing; this is the invention of the younger Arabs.

But let us first press the astrologers with objections, which they cannot avoid if they wish to stand by their principles and not renounce their doctrine. In the very first constitution of the world, which all agree on, do they define the beginning of a new great orbit or not? If not, what could be more absurd? If they do define such a beginning, by mathematical

deduction I will prove that whatever they have determined about the great orbits is impossible. The things they say are true cannot have happened when the new world's orbit began.

Albumasar, whose authority they especially rely on, counts a full two thousand two hundred and twenty-eight years from the beginning of the world to the Flood, although Eusebius' calculation exceeds this number by sixteen years. But it makes no difference, and when disputing with the astrologers, we will use their own opinions. Let the number of years from Adam to the Flood be according to Albumasar's view, against whom we argue. From the conjunction that prefigured the Flood, with which the new world began, there are left one thousand nine hundred and forty-seven years to the creation of the world.

Since this conjunction, as we were saying, preceded the Flood by two hundred and seventy-nine years, let us divide that by the number of a great orbit, that is, by three hundred and sixty. This results in five full great orbits, with one hundred and forty-seven years remaining undivided. Therefore, the beginning of the great orbit must necessarily be placed in the one hundred and forty-eighth year of the world. If that number of years is part of another orbit, it will necessarily be that two hundred and thirteen years of an orbit passed before there were any years at all – that is, before the very beginning of the world – which is clearly absurd. Yet astrologers say it is so.

There is no one more reckless than astrologers, none more inclined by nature or profession to lying and deceit. They invent something to sustain their doctrine and to deceive the ignorant with tricks, which is typical of their malice and vanity. Yet the power of truth ensures the result is always false, completely impossible, or self-contradictory – that is, contrary to their own statements and doctrines. Astrologers do not notice this, but spread their ideas, being both forgetful and deceitful – a fault of ignorance and sluggishness of mind. An example is the matter we are discussing.

In arguing that the heavens caused the world-wide inundation of the Great Flood, they added a childish fiction to their great conjunction: that a new age of the world began with it, whereby the world would be renewed. So that nothing would be lacking to their deceit, they assigned Saturn and Cancer as rulers of that age, since Saturn, among the planets, and Cancer, among the signs, are considered the sources of cold and moisture. This reveals their malice and vanity; but their foolishness, sluggishness, and ignorance are also evident.

First because they fail to see the absurdity. Their new cycle of the world would have no starting point. Second because, if Saturn and Cancer governed that age, we must necessarily conclude that the first full cycle was governed by Mars and Aquarius, which they could never justify as the origin of world dominion by any reasoning whatsoever. If they were speaking of the Moon, someone might offer its proximity to the Earth as a reason; of Saturn, its elevated orbit; of the Sun, its power of influence; of Jupiter or Venus, the beneficence of their natures. But with Mars, there is no reason it deserves the first governance of the world. Likewise, Aquarius holds no initial prerogative, as Cancer, Libra, and Capricorn are thought to possess.

But why wander further on this path? It is plainly and clearly evident how deceitful and forgetful astrologers are. They claim that Cancer and Saturn governed the age before the Flood, because they wish the inundation of waters to be attributed to a moist and cold planet. Yet, since it seems reasonable to begin the world's governance among the planets with the Sun, and among the signs with Aries, they claim the ruling planet of the world was the Sun and the ruling sign Aries.

Thus writes Haly Abenragel, as does Albumasar in the first book of *On Great Conjunctions*. These claims are so contradictory that they cannot both be true at the same time. If there were five complete great cycles before the Flood, and five or six incomplete ones extending back to the beginning of the world, and Aries governed the first cycle, then

Cancer cannot govern the fifth or sixth. Nor can Saturn be the ruler of the cycle of the Flood if the solar sign ruled the first. If Aries and the Sun governed the first cycle, then Taurus and Venus ruled the second, Gemini and Mercury the third, and Cancer and the Moon the fourth. Neither Cancer nor Saturn, however, would govern the fifth or sixth cycle. Saturn would instead be paired with Leo, and Jupiter with Virgo.

How, then, do these authors not blush at leaving such writings to posterity, which bear the most evident testimony of profound ignorance and dullness? But this is typical of the authors of astrology.

A certain Ocliaton, inventing for himself other great cycles, argued that both the creation of the world and the birth of Jesus would mark the beginning of a new cycle, with Aries, the head of the signs, presiding over both events. Since he could not achieve this otherwise, he claimed the number of years from Adam to Christ were four thousand three hundred and twenty. If we were to accept this total, it would indeed fulfil his desire.

However, no historical account accepts this number. It diverges from Greek and Latin authors by nearly nine hundred years, from Hebrew scholars by five hundred years, and from other astronomers by as much as eleven hundred years. Ocliaton asserted what was not true rather than abandon the theory he had concocted in his own favour.

It is like those ancient thinkers Aristotle recounts, who, having decided everything must be arranged in tens, and finding no more than nine spheres in the universe, concluded there must necessarily be another earth to complete their perfect number of ten. They were driven by a strange imitation of divine wisdom, which does not conform itself to things, but instead shapes the truth of things to itself.

Finally, if these great cycles were something real, what astrologers claim would be necessarily false, since they err in calculating the revolutions. Astrologers believe the current cycle, now asserted to be in its one hundred and ninety fifth year, is the nineteenth from the

first and the fourteenth from the one under which the Flood occurred. Accordingly, they assign Leo and the Moon as its rulers.

But this cannot be true unless we count six thousand eight hundred and thirty-eight years from the creation of the world to the present, which exceeds the true reckoning of years by more than fourteen hundred, as we demonstrated in our treatise *On the True Calculation of Time*. Even if we follow other historical accounts, such as those of the Latins who count more years, we find far fewer than the number required for their invented cycles. No historical record reaches six thousand seven hundred, yet astrologers are found to add nearly one hundred and forty more years to defend their theory of cycles. Even the unlearned would now consider this theory refuted.

Chapter Three

Saturnian revolutions, an invention of Albumasar, are contrary both to historical records and to reason.

Now we turn to the Saturnian revolutions. These were invented by Albumasar, though not widely adopted by later thinkers. Let us examine what they are, what led Albumasar to propose them, and how much he erred in this, as in other matters.

When Saturn completes ten cycles, a period amounting to roughly three hundred years, he claims significant changes occur in human affairs. Albumasar was influenced by the observation that, in some of his historical accounts, noteworthy events happened after this period. He thus established the doctrine that ten Saturnian revolutions bring about major changes in worldly matters.

But see how mistaken he was in this first historical conjecture! He states that three hundred years after Alexander the Great, Aielasor, son of Bel, appeared and defeated the

Persians. Then, three hundred years later, Jesus appeared, referring, of course, to our Lord. According to this, there would be six hundred years between Jesus and Alexander. This is demonstrably false beyond any doubt, as no historical record places more than four hundred years between Christ and Alexander. Even Alfonso, in his astronomical tables, counts only three hundred and eleven years.

Let us now examine the foundations upon which these wondrous doctrines are built. Albumasar claims that after Jesus, ten Saturnian revolutions elapsed before the rise of a religion that mediated between the Nazarenes and the Pagans (as they refer to the gentile nations). But we know for certain that no religion emerged after Christ until Muhammad. It seems Arab astrologers confused this with the sect of the Manichaeans, who are also called *Minin* by the Talmudists. Yet that heresy arose not after the completion of ten Saturnian revolutions but before the ninth revolution was fulfilled.

Had Albumasar based his claims on reliable history, it still would not justify turning the observation into a dogma, claiming ten Saturnian periods produce great changes. Otherwise, I could invent a thousand such doctrines. For example, the Hebrews say the First Temple, built by Solomon, stood for around four hundred years or slightly more. The Second Temple, built under Darius, is said to have lasted no more than ten Saturnian cycles, meaning four hundred and ten years, after which, for nearly the same length of time, the Jews created their own laws while in Babylon.

From this, let us derive a dogma: every fourteenth Saturnian revolution brings great change to the Jewish nation. Such a claim would be more plausible than Albumasar's preference for the number ten. I would gladly ask him: where does nature begin these revolutions? Under what part of the heavens does this period commence? Let him offer a reason why one starting point should be preferred over another.

But there is no need to labour further in refuting these trifles, especially since they satisfy few astrologers beyond Albumasar himself. Even d'Ailly, who made great use of these ideas in his treatise *On the Harmony of History and Astrology*, admitted in his *Elucidarium* that they had no foundation. D'Ailly dismantled much of his earlier work with harsh critique, undermining a significant portion of his own little book with this honest confession.

Chapter Four

The topics to be discussed and the conflicting opinions of astrologers regarding the great conjunctions.

What remains to be discussed concerns the approach and recession of the great orb and the ninth sphere. This will be examined in the following book; for now, let us turn to great conjunctions.

It will be worthwhile to first present what astrologers believe about these matters so that our refutations may be more easily understood. Even the mere recounting will serve the purpose of refutation – as we will see, there is no consensus among astrologers as to what constitutes the greatest conjunction, what is greater, and what is intermediate. This issue is not merely a dispute over terminology but also leads to significant differences in predictions. Some write that effects should be expected from the greatest conjunctions, others from the intermediate, and yet others from the lesser ones.

The general opinion, as conveyed by Alchabitius and Leopold, and before them Albumasar, is as follows: a great conjunction occurs when Jupiter and Saturn are in conjunction, which happens every twenty years. A greater conjunction takes place when these planets, having moved from one triplicity to another, meet at the boundaries of a new triplicity. This occurs roughly every two hundred and forty years, for within the limits of a

single trigon they conjoin twelve times, after which they move to the sign of the next trigon. Importantly, the transition is not to the first sign of the new trigon, but to the second. For instance, if they depart from Capricorn, their next conjunction in that triplicity will not be in Libra but in Aquarius.

The intermediate conjunction is one that occurs every thirty years between Saturn and Mars in Cancer. The greatest of all, according to common opinion, is the conjunction of Jupiter and Saturn in Aries, which happens every nine hundred and sixty years. Mashallah, however, disagrees with this in his book *On the Conjunctions*, claiming that the greatest conjunction is that of the three superior planets, Saturn, Jupiter, and Mars. He expects changes in sects, transfers of kingdoms, and the advent of prophets from this event, rather than from the conjunction of Jupiter and Saturn in Aries, as is commonly believed among astrologers. He ranks the conjunction of Jupiter and Saturn as second, Saturn and Mars as third, and Jupiter and Mars as fourth.

Let us now examine how far each of these strays from the truth.

Chapter Five

When planets are together in great conjunction, they are no more capable of influencing events than when separated. These so-called great conjunctions are a new invention, born from a flawed understanding of Ptolemy's writings.

First of all, I wish to know why astrologers believe Jupiter and Saturn accomplish greater things together, rather than separately, when each executes and exercises its own proper forces. The mixing of rays of different natures indeed creates something that distinct and individual influences would not produce; but why this should be greater, we cannot find

any reason. We are more inclined to believe that less is accomplished when powers are combined than when each planet acts separately.

If the planets coming together were of the same property, and had powers productive of the same effects, surely, with the addition of the double ray, the effect would be doubled; but since Jupiter and Saturn are of contrary and opposing natures, one necessarily hinders the other. They restrain and bind each other's powers, so in the resulting mixture we can expect nothing except mediocrity, after the manner of things that arise from the combination of extremes. Similarly, as astrologers themselves often say, when Saturn and Mars are together, each is harmful and each is maleficent, but because their baleful powers differ, their conjunction does not result in some greater and astonishing evil. Rather the force of one malefic is broken and weakened by the other, so neither inflicts harm even as each strives to harm according to its nature.

Thus it is uncertain, if worldly events are subject to the heavens, that greater and more enduring things happen when the superior stars are in conjunction, as opposed to when one of them gains more than usual strength and power, with the others weakened. But if planets in conjunction produce greater effects on this world than when they are separated, we would not attribute this to the conjunction of Jupiter and Saturn or Mars. Rather, we will demonstrate, by reason and by the authority of the highest astrologers, that other stars hold the primary influence in such matters. No ancient authority judged the universal changes of the world by so-called great conjunctions. Neither Julius Firmicus Maternus, a most curious investigator of astrology, nor Paul of Alexandria, nor Hephaestion, nor Theophilus, nor Astaxarchus, nor even Ptolemy himself, whom we take as sufficient testimony, say anything about them. We need no lesser-known witnesses against these claims.

In the second book of *Apotelesmata*, describing the foreseeing of general and world-changing events, Ptolemy attributes such events solely to the eclipses of the Sun and Moon.

Nothing seems more reasonable, for universal and great effects must be referred to causes that are themselves greatest, universal, and most effective. Only two planets possess universal influence, the Sun and the Moon, whose light is nothing but the Sun's light transmitted to the Earth through the Moon, as though through a mirror.

Therefore, if any celestial force is the origin and cause of universal and great effects, it must be these stars. When Mashallah claims great events arise from Jupiter and Saturn because their motion is slower, this proves what he denies more than what he affirms. It is the unanimous opinion of all that a more noble body and a more potent force correspond to a swifter motion.

Those who defend the role and dignity of the superior stars, lest they be considered weaker because they complete their orbit more slowly, will argue from the proportion of the spheres that these planets are swifter than the length of their periods makes it seem. I know what such writers say about Ptolemy: that he omitted this from the *Apotelesmata* to conceal the mystery. Thus speaks Haly Avenrodan, his commentator. However, they claim in the *Centiloquium* (as it is called) that Ptolemy provided much evidence for this matter. In the fiftieth proposition of that work, he commands we not forget the conjunctions of the planets, which are highly potent. Likewise, in the fifty-eighth and the fifth of the sixtieth propositions, he reminds us of these same matters, offering significant precepts regarding them, and distinguishing between the greatest, medium, and smallest conjunctions.

I would prefer they provide a response, so it may become clear that whichever of their doctrines seem grand and wondrous have instead sprung from vain opinions or from misunderstanding of the ancient authorities. As to their claim Ptolemy remained silent in the *Apotelesmata* so as not to reveal a mystery, I am so far from denying it I do not even believe he revealed it in the *Centiloquium*, where he speaks as little about these conjunctions as he does about the death of Priam or the Trojan War.

But how they have distorted many statements of that author, and how great a chain of errors has been propagated from a single one, we shall soon make clear.

The fiftieth statement of Ptolemy, as they present it in the common edition, reads: “Do not forget there are one hundred and twenty conjunctions among the wandering stars. In these lies the greater knowledge of things that happen in this world, leading to increase or decrease.” In Greek, however, it is written thus: “Let us not overlook one hundred and nineteen conjunctions. In these is found the conjunction of things that occur in the world of generation and corruption.”

The barbarous translation assigns more importance to these conjunctions than Ptolemy himself, for he does not refer to greater knowledge of things in the world. Furthermore, the meaning of the statement is nothing other than that we should not observe only the individual properties of a single star. Rather, we should understand various effects arise from their conjunctions – something no one denies and which all astrologers grant.

As to which of the greatest changes in earthly matters we ought to attribute to the superior stars, Ptolemy did not say. Indeed, if his words are read and understood correctly, they reveal an opposing view. He did not say, as is commonly read, that there are one hundred and twenty conjunctions, but only one hundred and nineteen. He did not count the conjunction of the Sun and Moon among them, as it holds a unique privilege and singular prerogative in great and universal changes. All the remaining conjunctions he compiles indiscriminately into a number and order, with none having any particular distinction.

The barbarous commentators, failing to notice this, supposed an omission had occurred due to scribal error, and so added the Sun and Moon’s conjunction. They insisted it should be read as one hundred and twenty instead of one hundred and nineteen, as all Greek manuscripts have it. Not content with merely corrupting meaning, they also adulterated the literal text itself.

Let us move on. Ptolemy writes in the fifty-eighth aphorism as follows: “Examine the place of the conjunction in relation to the ascendant of the year, and observe when the progression reaches that point; then the time will have come.”

The sixty-fifth aphorism is of this nature: “In the least conjunction, consider the difference of the mean conjunction, and in the mean, the difference of the greatest conjunction.” The Arabs and Latins both think that Ptolemy, in each case, means the conjunction of Saturn and Jupiter.

But no one would be so mistaken who has ever read the Greek authors of astrology, especially Ptolemy, with eyes unclouded by ignorance. The term *synodos*, which we translate as ‘conjunction,’ always refers to the union of the Sun and Moon when used without qualification, unless it specifies the planets involved, such as the conjunction of Venus and Mercury, Jupiter and Saturn, or other planets.

In both aphorisms Ptolemy uses *synodos* without further specification, so it is evident to all acquainted with Greek that Ptolemy refers to the conjunction of the luminaries, that is, the Sun and Moon, and not to the conjunctions of other stars. Thus, the fifty-eighth aphorism means carefully noting the sign and location where the conjunction of the Sun and Moon occurs in the revolution of the year. When the annual progression, distributed through the months of the year, reaches that point (wherein one sign succeeds another according to the order established in the dominion of power) we should expect the desired outcome. For it was indicated by the preceding conjunction of the Sun and Moon at the beginning of the year’s revolution.

Ptolemy primarily uses the conjunctions of the luminaries to investigate the events of the entire year, which is well-known to anyone who has studied his books. However, in translation, many additions, omissions, and interpolations have been made. Instead of using ‘conjunction,’ the term ‘minor conjunction’ is often read, although there is no indication of a

difference between major and minor in the Greek manuscripts. Moreover, the term for 'progression' is extended to several years, though Ptolemy only mentions the events of a single year.

More weight is given to the final statement where the greatest, middle, and smallest conjunctions are distinguished, a difference many do not understand in the conjunctions of the luminaries. But this is easily understood by those who have attentively studied Ptolemy's work. Ptolemy attributes all conjunctions to the Sun and Moon, and then distinguishes them into three categories based on order and type.

Those that cause the eclipse of one of the luminaries, he places in the first place, since their events are capable of being foreseen not just for one year, but for many years. We shall call these the greatest, the moments when the stars are most aligned, neither differing in longitude nor latitude, and they foretell the most distant future events. In contrast, the smallest conjunctions occur monthly and indicate the disposition for only a single month. The middle ones, between these extremes, occur as the Sun enters the four tropical signs – Aries, Cancer, Libra, and Capricorn – which mark the beginning of each season, thereby indicating the nature of the coming year regarding spring, summer, autumn, or winter.

That which the universal disposition indicates is distinguished and determined by the particular one that follows. Ptolemy therefore says the middle conjunction is the difference of the greatest and the smallest of the middle.

For example, if the conjunction of the Moon and Sun immediately preceding the vernal equinox shows us the future quality of spring, it is modified by the nature of the conjunctions that occur in each following month by regular revolution. Just as monthly conjunctions relate to those four seasonal conjunctions, so do quarterly ones relate to the greater and rarer meetings of eclipsing stars.

This is Ptolemy's opinion about the greatest, middle, and smallest conjunctions, which barbarians, not understanding, have fabricated as referring to the conjunctions of Saturn and Jupiter, with the greatest returning every nine hundred and sixty years, the middle every two hundred and forty years, and the smallest every twenty years. Which does not even agree with the statement they desire to interpret, since the greatest conjunction according to them encompasses both the middle and the smallest. Therefore, the effect of the greatest conjunction cannot be determined by those smaller ones, since the former requires the revolutions of many centuries.

What did Ptolemy mean by the middle conjunction being the difference of the greatest and the smallest of the middle? We have seen a ludicrous fiction born from the false understanding of a single author. Astrologers so proudly boast, and imagine themselves exalted and triumphant in their belief that all religion is bound to the stars. Thereby they subject the most sacred laws, the advent of prophets, and divine miracles, to the powers of the stars and fates. In no other fashion do they show themselves more childish, more unskilled, or more ridiculous.

Chapter Six

The principal astrologers used mean conjunctions, not true ones. Other errors of theirs regarding the same.

But perhaps one astrologer will say: So be it! We do not understand Ptolemy. What if, just as a storm sometimes drives a ship into port, this error has led us to the truth? Whatever Ptolemy and others may have thought, experience has confirmed that no great change in religions or kingdoms ever occurs without being preceded by some conjunction of the higher

stars. Nor has any such conjunction ever occurred without bringing forth changes in earthly matters.

Well and good, they recognise the storm; whether they sit comfortably in port, we shall see. Even if they have been delirious with regard to great matters, how reliable are these weak points they build atop experience? We shall first demonstrate this universally, then examine great conjunctions individually, those astrologers attribute to remarkable events, and then show they are clearly false, falsely calculated, and falsely linked to effects.

First of all, every proponent of this doctrine does not use true conjunctions but rather mean conjunctions. That is, imaginary and fictitious ones. For all to understand clearly, I will explain the difference between true motion and mean motion.

The wandering stars do not move through the Zodiac in an equal course; that is, they do not pass through equal portions of it in equal intervals of time. Those who measure such motions and reduce them to numerical calculations have devised a uniform motion for each planet, so that from this fictitious and uniform motion, they might more easily deduce the unequal and true motion. Ptolemy calls this fictitious motion *periodic*, while later scholars call it *mean* motion, because they use it as a middle term to investigate true motion.

When we seek the position of a planet through calculations of its motion, we sometimes use mean motion, but not because mean motion indicates where the planet actually is. Instead, it serves as a step to find its true position by an easier method and reasoning process. A planet is never actually where mean motion dictates, since it never moves in that manner. But this concept was devised by astrologers so that they might attain the truth with greater certainty by following a certain system.

Those who judge future events based on great conjunctions use *mean* conjunctions, not true ones. That Jupiter and Saturn conjoin every twenty years, that they meet at the beginnings of triplicities every two hundred years, and that they gather within the bounds of

Aries every nine hundred and sixty years… this is utterly false if we consider true motion. It is approximately true, though not precisely, if we refer to mean motion, which is fictitious and false, having no actual existence, but devised by mathematicians for the sake of easier teaching.

The position indicated by mean motion differs from that determined by true motion to such a degree that even the sign of a conjunction can differ. For example, a conjunction might be assigned to Pisces, though it actually occurs in Aquarius. The timing varies so greatly that, when dealing with conjunctions recurring every two hundred and forty years, the true conjunction may precede the mean one by as much as a hundred years.

In the tables, it appears from proper calculation that Jupiter and Saturn, transitioning from the earthly triplicity to the airy triplicity, met in Aquarius in the year 1226. According to mean motion, they were supposed to remain in the airy triplicity for two hundred and forty years, yet after about one hundred and forty years, in the year 1345, transition occurred from the airy triplicity to the watery one, when they conjoined in Scorpio. From that point, they continued to be found together only in watery signs, and they never returned to the airy triplicity thereafter.

What then is this madness, that wages war on clear truth, uses brazenly false and fictitious conveniences, and attributes human events with blind recklessness to constellations where no true alignment exists? How can they believe something that neither is, nor was, nor ever will be, is somehow the cause of things that actually exist? There is nothing more deluded than this vanity, into which nearly all the leading authors of astrology have fallen.

Albumasar, the chief advocate of this doctrine, in his book *On the Great Conjunctions*, highly esteemed among astrologers, always relied on mean conjunctions and never on true ones. Likewise, Abraham the Jew [Spaniard], in his work *The Redemption of Israel*, seeks one or two true conjunctions, but soon turns entirely to mean ones, making no

mention whatsoever of true conjunctions. Pierre d'Ailly, in his treatise *On the Harmony of History and Astrology*, presents seven great conjunctions. All are mean conjunctions; none are true.

Many others, afflicted by the same malady, follow this same error. About them we will later speak in detail. Yet this present discussion alone suffices to show that what astrologers claim is baseless. If the very constellation from which they prophesy is non-existent, there can be no truth in their predictions.

Since these mean conjunctions – things that are, in truth, nothing at all – do not correspond to reality, they do not occur at the desired times, and so astrologers devise another foolishness to defend their prior madness. They claim the effects foretold by these conjunctions do not follow immediately, nor even soon, but rather after many years. Sometimes a hundred, two hundred, or even more.

See how greatly astrologers are mistaken. A potent and effective cause does not begin its effects late but rather ceases late; it must either begin immediately or soon. Therefore, the virtue of these conjunctions, whether effective or weak, cannot behave as astrologers claim. If effective, it cannot long delay its action; if weak, it cannot endure long enough to act late but still produce an effect.

A great force overcomes and subdues resistance and obstacles; a weak force vanishes, dissolving itself by its own tenuous nature over an extended period.

Moreover, within this gap of time, new conjunctions always intervene, whose nature is to obliterate the previous ones. A succeeding constellation overpowers its predecessor. When an eclipse of the luminaries happens at a certain time of year, astrologers are accustomed to say the fate associated with the year's inception has ceased. Surely a subsequent conjunction, especially one different in nature and quality, causes the same cessation? Yet astrologers claim the first conjunction governs effects for as long as three

hundred years, despite many varying constellations occurring in between. No philosopher, nor even the slowest of men, would ever assert this nonsense.

Another inexpiable error greatly compounds the mistake. Astrologers' calculations of time are so egregiously flawed that a conjunction supposedly preceding some event by two hundred years has, in truth, occurred fourteen hundred years prior. This matter will be discussed in more detail in the subsequent chapters of this book. For now, we can safely state astrologers are false, ignorant, and unskilled.

But observe how cunning these illustrious soothsayers are! To ensure they are never without a means of deception, they have so linked their fictions together that when something unusual happens, they can always attribute it to some prior conjunction. They claim the power of one conjunction lasts until the hour of the next, and whatever intervenes in between may always be attributed to some conjunction. Yet they have not seen how their fallacy leads to their own ruin.

According to their reasoning, there can be no great effect without a great conjunction, and no great conjunction without a great effect, since such causes must always accompany such events. But astrologers necessarily create a situation where such causes are frequently exhausted without producing corresponding events. This is because great and wondrous happenings do not always arise from these conjunctions (indeed, they rarely do, despite claims that great conjunctions bring them about). And yet, according to astrological theory, the power of these conjunctions, uninterrupted by succession, remains ever-present.

At the general level, these arguments suffice against those who impiously and recklessly speak of future events based on supposed great conjunctions. Now, let us examine specific points in detail.

Chapter Seven

What order is to be observed. That Pierre d'Ailly held different opinions at different times.

Let us begin with the greatest conjunctions, which Pierre d'Ailly compiles in his treatise *On the Harmony of History and Astrology*, intending thereby to confirm the claim of astrologers that such conjunctions never occur without a great change in earthly matters. D'Ailly himself openly contradicts this entire supposed concord in his *Elucidarium*, confessing plainly, both there and elsewhere, that while he uses Saturnian revolutions and great conjunctions in his earlier work, the former have no foundation, and the latter were never calculated by himself, but only mentioned once.

It is all the more surprising d'Ailly earns praise here when he did not even convince himself. But since he occasionally raises arguments against himself that are poorly reasoned, unnecessary, and insufficiently expressed, we will articulate a few decisive points by which his entire treatise may be thoroughly refuted. Then we will move on to refuting the other conjunctions that Abraham the Jew, Albumasar, and many others, including d'Ailly in his *Elucidarium*, have proposed.

However, since we must often speak about the reckoning of time, I believe it necessary to preface certain points. Firstly, when there is uncertainty about dates, it is not, as d'Ailly thinks, within the astrologers' discretion to determine the matter, but rather within the domain of historical study. Secondly, when there is disagreement among historical writers, we shall consider which account we ought primarily to follow. We shall touch upon this subject only briefly here. We have discussed it more extensively in a separate work titled *On the True Calculation of Time*.

Chapter Eight

The timing of events is to be sought not from astrology, as d'Ailly believes, but from history.

D'Ailly, in his book *On the Harmony of History and Astrology*, believes the number of years from the beginning of the world to the present can be determined by astrological reasoning, and reduced to the truth presented by various sacred or foreign histories. If you have determined the natal chart of the world's very birth, you will be able to calculate, from the beginning of the world, the conjunction of Saturn and Jupiter. If you investigate another conjunction closest to your own time, the interval between the first and last conjunction will be derived from the calculation of the intermediate conjunctions.

This was his opinion at that time, but in his *Elucidarium*, he openly admits astrology does not provide a reliable method regarding the uncertain number of years. Even the greatest astrologers never attempted this, nor did they promise anything of the sort from their art. Yet, despite this admission, I do not know why he persists in the view that the ultimate question of the reckoning of time should be referred to astrologers, and that whatever discrepancies are found in histories regarding the year of the world's creation should be corrected and amended according to their opinions.

We will show this cannot be defended by any reasoning. If an astronomer knows some true position of the stars that once existed, and if he has recorded another near position, he can determine with absolute certainty how much time necessarily lies between them. But how will this help if the time of an event is unknown?

Suppose someone says that three thousand years have passed from Christ to the present, while another says one thousand four hundred years. In settling this dispute, what role will the astronomer have? He might show that the difference between the star position under which Christ was born and the present configuration cannot span three thousand years,

but rather one thousand four hundred. But what slowness, what dullness is this, that you presuppose as certain what is still in question? The astrologer does not know the position of the stars Christ was born under, unless he first knows from history when He was born.

Let us move on to more distant times.

Alfonso counts three thousand one hundred and two years from the Flood to Christ. Albumasar holds the same opinion, whom Alfonso indeed followed. However, all history contradicts this number. D'Ailly believes the histories are in error, rather than the astrologers. By what reasoning? Because from the conjunction that preceded the Flood to Christ's time, so many years have elapsed according to their reckoning? No one denies this, but how did they learn there was a conjunction so many years before the Flood as they claim? Could they have known this from any source other than history? This is so evident that, unless I had seen d'Ailly fall into this error, I would have thought I was wasting words on a trivial matter.

How ridiculous are those who infer the world's age from the first conjunction at the beginning of creation, as if we could so determine the year and even the hour when the world began! Let no one dispute that chronology must be sought from history, the teacher of events, and that astronomy, her student, cannot be her judge in this matter.

I will grant Alfonso that the position of the stars, as shown by his tables, was indeed so many millennia before Christ. But I will not grant that during these periods a cataclysm or other historical event occurred, unless trustworthy history proves it to me.

All astronomers err greatly in this calculation of time, as will become even clearer. This error arises because they rely on false histories. Latin astronomers follow the Arabs, and the Arabs are highly prone to fables; moreover, the translations from Greek and Latin historians into their language corrupted much of what was accurate. This happens easily among people hostile to letters, but especially in the notation of numbers, where even the utmost care of scribes frequently leads to errors. Therefore, true and trustworthy histories

must be used. Among these, no Christian will doubt that sacred history is to be preferred to all others, nor will either a Hebrew or a Saracen.

Regarding antediluvian events, either the Mosaic account or no account at all is available to the gentiles as history, since nothing from those times has been recorded in writing by other peoples. If, in the sacred scriptures, the Greek version in its reckoning of years differs from the Hebrew truth, no one of sound judgement prefers the authority of the translator to that of the original author. St Jerome agrees with the Hebrew numbers and St Augustine believes they should be followed. Augustine accepts and approves the older version, and when he discusses this difference in the reckoning of years, he states that historical facts must be sought from the original language. He considers the discrepancies in the Septuagint more a matter of mystery than historical error, but nonetheless does not doubt that the truth of the text resides with the Hebrews.

Chapter Nine

The main conclusion of d'Ailly in the book On the Harmony of History and Astrology.

Having briefly laid the foundations regarding the true computation of time, let us turn to those greatest conjunctions of the astrologers, that is, to their greatest insanities.

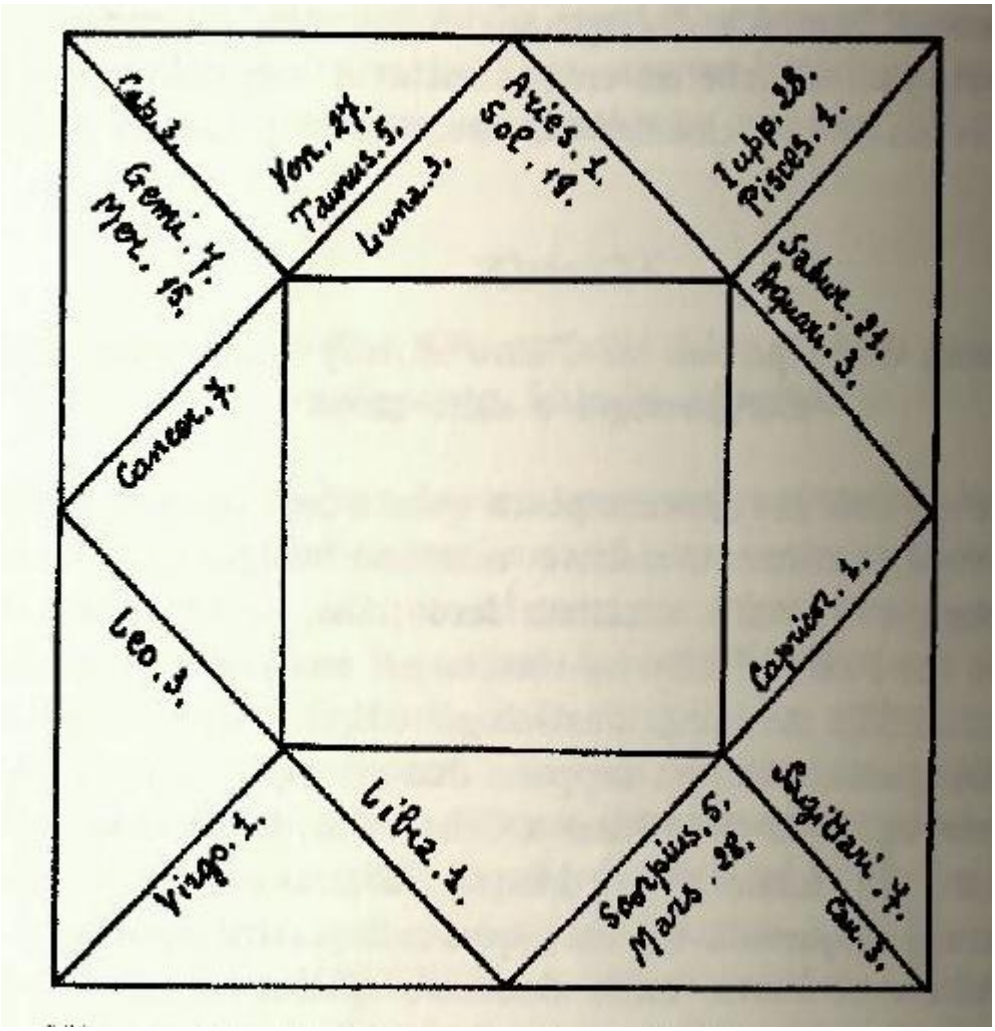
We start with those collected by Pierre d'Ailly in his treatise *On the Harmony of History and Astrology*. In this work, he proposes two principles: the first about the number of years from Adam to Christ, and the second about the natal chart of the world itself. D'Ailly claims five thousand three hundred and forty-four years passed from Adam to Jesus, two thousand two hundred and forty-two years from Adam to the Flood, and three thousand one hundred and two years from the Flood to Jesus.

In the first establishment of the world, the stars were thus positioned in the sky.

The first part of Cancer held the Ascendant, while the highest part of the sky was possessed by the first part of Aries. Mercury was in the fifteenth part of Gemini, occupying the twelfth region of the sky, while Venus was in Taurus, occupying the eleventh.

Both luminaries – nocturnal in Taurus and diurnal in the first part of Aries – shone through the middle and upper regions of the sky. Saturn was in Aquarius, the house of death; Jupiter held the ninth place in the sky in Pisces; Mars resided in Scorpio and in the fifth house from the Ascendant, and in the same position but in Sagittarius, was the tail of the Dragon.

This entire arrangement, the following diagram presents before your eyes.



With these positions established, it is without question that the first great conjunction of Saturn and Jupiter occurred at the beginning of Aries, three hundred and twenty years after the creation of the world. After this, six other conjunctions are enumerated, with intervals of

nine hundred and sixty years in between due to the error of the median motion. Thus, the seventh great conjunction from the creation of the world is said to have occurred in *Anno Domini* 735. The eighth will follow in the year 1693.

With these positions so arranged, d'Ailly rummages through the historical records for key events that occurred between one great conjunction and another, specifically during the nine-hundred-and-sixty-year interval between the greatest conjunctions. He considers any noteworthy or memorable event attributable to the preceding great conjunction. Since he always finds some great and memorable event, he believes it is confirmed that these great conjunctions must be followed by significant changes in the lower world. Thereby he fulfils his earlier promise to show how historical truth aligns with astrological truth. This is the summary and foundation of the entire book.

Chapter Ten

That d'Ailly errs in many ways. Even if what he assumes were true, he would still not achieve his goal.

Let us assume all d'Ailly's assumptions be true regarding the conjunctions, the timing of events and deeds, the birth of the world. Let us grant him everything. What confirmation of astrology through history is this, if we show that never in the lapse of nine hundred and sixty years has the world failed to witness some great change in the fates of things or the condition of humanity?

Describe this span of years starting from different points. Not, for example, from the three hundred and twentieth year of the world, which was the time of the first conjunction, but from the five hundredth year of the world, and count nine hundred years from one conjunction to another. You will find a variety of wars, laws, prophets, plagues, and events of

manifold and diverse kinds occurring over such a long stretch of time. Why not always trace actions over two hundred years to the moment of conjunction? This is far too dull a Minerva if we harmonise astrology with history in this manner.

But neither are d'Ailly's conjunctions real. He uses mean ones, that is, false and non-existent; nor, even if we accept them as mean conjunctions, are they to be referred to those times. Nor is the number of years from Adam to Christ what he supposed. The true reckoning exceeds it by more than fourteen hundred years. Nor did those deeds or events occur at the times he thought. The 'birth of the world' he describes is not only dubious but demonstrably impossible by astrological reasoning.

Therefore, the entire book could be corrected with a single stroke of the pen. Everyone knows these conjunctions are mean, not true ones, and even d'Ailly does not deny it. If the nativity of the world from which all calculations are drawn is impossible, those calculations based on mean motion will also be false. Whether that birth is impossible, let Mercury himself interpret for you, who, in that figure, is placed fifty-six degrees away from the Sun, though he would swear by all the gods and goddesses that he never strayed even a nail's breadth beyond twenty-nine degrees. This is an error too obvious and inexcusable!

Mercury might also consider the primordial figure of the world, which d'Ailly presents in the *Elucidarium*, to be laden with remarkable illusions. D'Ailly attributes it to the Chaldeans and Ishmaelites, with divine power supposedly making them privy to this mystery. There Mercury is placed in the first part of Gemini, and the Sun in the first part of Aries, resulting in Mercury being sixty degrees away from the Sun, something any astronomer would insist is utterly impossible.

But let us return to the purported conjunctions. These become impossible once the original figure of the heavens, whence they were all derived, is discarded. Additionally, no

conjunction occurs in Aries even after nine hundred years, as Abraham the Spaniard teaches in the sixth book entitled *The Redemption of Israel*.

Neither did the events d'Ailly relates to those conjunctions occur at the times he believes. From the creation of the world to the Flood is not, as he reports, two thousand two hundred and forty-two years, but rather one thousand six hundred and forty-six, as will later be demonstrated. Therefore, that third great conjunction, which d'Ailly claims preceded the Flood by two years, supposedly occurring two thousand two hundred and forty years after the world's creation, actually happened six hundred and eighty-four years after the Flood itself. Likewise, d'Ailly notes the fourth great conjunction in the nine hundred and forty-second year after the Flood, and asserts that Abraham the Patriarch was born sixteen years before it. However, Abraham rejoiced at seeing the day of the Lord six hundred and thirty years before that conjunction, for he was born in the two hundred and ninety-second year after the Flood.

No historical account postulates as many years from the Flood to Jesus as d'Ailly, who follows Albumasar and Alfonso. They number this three thousand one hundred and two years, a calculation exceeding the true reckoning by nearly eight hundred years. From the Flood to Abraham, there are two hundred and ninety-two years; from Abraham to the reign of David, approximately nine hundred and forty, according to the testimony of both editions and Rabanus Maurus. From the reign of David to the beginning of the Babylonian Captivity, which, according to Jeremiah's prophecy, lasted fifty years, there are about four hundred and eighty years, as Bede, Rabanus, and the Hebrews all agree.

But from the Captivity – that is, from when it began – to Jesus, there are five hundred and ninety years. If you add these numbers together, you find that from the Flood to Christ there are about two thousand and three hundred years. D'Ailly, however, counts three thousand one hundred and two years. The Latin historians fall short of the smaller number by

more than one hundred and forty years, but in our treatise *On the True Calculation of Time* even fewer years are to be calculated with the most exact reckoning.

The sixth great conjunction, which d'Ailly places two hundred and twenty-five years before Christ, actually occurred nearly six hundred years after the Gospel. His lack of diligence in historical matters is evident when he states that in *Anno Domini* 700, to which he attributes the seventh conjunction (albeit a false one), a plague of heretics arose in the Church, particularly the Arians. However, the Arian Heresy, which emerged around *Anno Domini* 300, was extinguished by 600.

I believe I have sufficiently discussed these matters with clear and evident proofs.

Chapter Eleven

On the timing of the Flood conjunction, astrologers disagree both among themselves and with the truth. Even if they are granted their assumptions, they still do not prove their assertions.

Let us move on to other major conjunctions, as noted by other writers with a bit more diligence. Albeit, such writers still suffer the taint of delirium, never mind error.

Let us begin with the most ancient conjunction, which commentators relate to the event of the Flood, the universal cataclysm. About this, we shall consider the conflicting and contradictory views of astrologers, how one accuses and reproaches the other, and how all of them plainly err. Moreover, we shall see that even if their assumptions were true, astrologers do not prove their assertions on such matters, namely that conjunctions facilitate a great change in the lower things.

The common opinion of the astrologers is that Jupiter and Saturn were in conjunction two hundred and seventy-nine years before the universal Flood, in the fourteenth part of

Cancer. The beginning of Aries was in the Ascendant, with both stars being placed in the fourth region of the heavens. This is established by Omar in the book *On Nativities*, and the majority of later astrologers largely adhere to his opinion.

Albumasar puts this conjunction eight years earlier, that is, two hundred and eighty-seven years before the Flood, a view followed by Henry Bate of Malines, his commentator. However, Henry calculated that the conjunction signifying Islam occurred in the year three thousand nine hundred and fifty-eight. He thereby contradicts Albumasar, relying instead on the Malines tables, and claims that, in the year Albumasar declared Jupiter and Saturn in conjunction, there was a four-sign interval between them.

Upon closer examination, Henry says that conjunction took place one thousand nine hundred and fifty-one years before the Islam-signifying constellation. This same Henry says they were joined in the fourth part of Cancer, but others using Alfonso's tables argue the conjunction occurred in the fourteenth part of that sign.

But let us set aside these astrological disagreements. They all equally diverge from the truth. Whether we use King Alfonso's tables or the Malines tables, when we trace celestial motions backwards from Christ, we arrive at that conjunction, as Henry states, three thousand three hundred and fifty-two years before Christ, with only minor variations in months from other calculations. However, as we demonstrated, the true reckoning suggests slightly more than two thousand three hundred years from the Flood to Christ. That conjunction preceding the cataclysm of the Flood was not two hundred and eighty years early, as they claim, but one thousand and eighty-two years. What, then, do great conjunctions have to do with the Flood?

I do not believe astrologers would extend the influence of that conjunction over so many years. But let us grant that it preceded the Flood by no more years than they claim, and that the Flood occurred at the time they propose. Do they demonstrate their assertions?

No. Even if we concede these points, the astrologers' conclusions remain false, vain, and ridiculous. Suppose that Saturn and Jupiter were indeed in conjunction in Cancer. Did the world perish, submerged by a flood of waters, because of that? Jupiter and Saturn have come together in Cancer more than ten times since those days, and yet the world did not perish. Not even a single region was submerged by water, let alone the entire globe. A rare, grand, and astonishing event… but what to make of the conjunction itself?

Even if we adhere to the astrologers' reasoning, this would not be counted among either the greatest or the larger conjunctions. Since only two planets were involved, neither at the beginning of a sign, such as Aries, nor at the start of any triplicity, what, then, is remarkable about it? Why should it be deemed so wondrous, of a nature never seen again, except on account of an extraordinary effect? Why, furthermore, should its influence be thought to have lasted so long, some two hundred and seventy-nine years?

If you claim that events occurring at the beginning of a triplicity exert influence until the beginning of the next one, you are stating something false, though it may align with your doctrines. But to apply this reasoning to a conjunction in the middle of a sign aligns neither with our truth nor your vanity, since you attribute no more than twenty years of influence and significance to it.

Since this conjunction occurred roughly in the middle of Cancer, there still remained, according to the calculation of mean motion, one hundred and twenty years before Saturn and Jupiter would transition from the watery triplicity to the fiery one. If that conjunction in Cancer preceded the Flood by as many years as you say, namely two hundred and seventy-nine, it follows that the deluge occurred in the middle of the fiery triplicity. The superior planets had already moved into the fiery triplicity one hundred and fifty-nine years before the cataclysm, and remained there for another one hundred and twenty years after the world's submersion.

Using Alfonso's tables, if we calculate the years back to the beginning of the world, and we compute the period from Christ to the Flood as being three thousand one hundred and ten years, we find the middle conjunction of Jupiter and Saturn in the ninth part of Sagittarius for two years and twenty-one days before the Flood. Prior to that, their true conjunction was in the fourteenth part of the same sign twenty-one years before the Flood, adding three hundred and thirty-seven days. Likewise, we encounter their middle conjunction in the tenth part of Aries, with the corresponding true conjunction preceding that middle one by approximately fifty-three days in the sixth part of that sign, that is, twenty-two years and twenty-five days before the Flood.

Why did these true conjunctions, closer to the relevant time and occurring in the proper strength of their triplicity (when they took place in fiery signs), not cause a conflagration, the destruction of the world by fire, instead of an event in Cancer, which astrologers associate with the Flood? This latter is false anyway, being calculated according to mean motion, having occurred so many years before the supposed time, and in complete opposition to subsequent conjunctions, which followed with entirely different natures and changes of triplicity.

Any astronomer who does not wish to deceive himself will admit that these are the ravings of deluded men, concocting absurdities at their whim and passion, merely to defend their errors and childish nonsense by any means possible.

It is therefore clear that at the time of the universal Flood, there was no conjunction of the sort astrologers claim. Even if we grant the number of years they desire, constellations of those times would have caused fires and conflagrations, rather than the inundation of waters.

Chapter Twelve

How deluded is Abraham the Jew concerning the conjunction signifying Moses and the prophecy of the Messiah!

Abraham the Foremost – for thus he is called among the Hebrews – whose disciple was Abraham Ibn Ezra, composed a book titled *The Redemption of Israel.* The purpose of this work was to investigate, by means of astrology, the time of the coming Messiah. Beginning from the birth of Moses, he imagines for himself some fanciful arrangement of the stars, including a conjunction of Saturn and Jupiter, which he associates with Moses, the kingdom of Israel, and the law given unto the Jewish people. Yet, as they often do, using the most religious language to protect their books from the fire, Abraham likewise consistently denies saying what he says.

Given the stars under which the kingdom of the Hebrews and their law arose, Abraham found a similar configuration, one he himself calculated. This was two thousand eight hundred and fifty-nine years after Moses, in the year of Christ 1464. Abraham accordingly decrees the arrival of the Messiah.

In that year, Saturn and Jupiter were together in Pisces, and twenty years earlier, in 1444, they had been together in Cancer. Based on these conjunctions, our astrologer declares with certainty the coming of the Messiah, whence all the marvellous events he anticipates through the Messiah will take place.

This has already been sufficiently refuted by the facts themselves – fifty years having passed since the first conjunction and thirty since the second – that what he fabricates about Moses can be disregarded. One should not believe a constellation gave the Hebrews a kingdom, since when that alignment of stars returned, their kingdom certainly did not return to them. Nor does it seem to have brought forth Moses. Having completed its course and returned to us, it produced no prophet and achieved nothing by its supposed influence.

Not only did the Hebrew people fail to prosper after those conjunctions, but they were overwhelmed by calamities almost as great as those suffered under Emperors Titus and Hadrian. Recently, all Jews have been expelled from the entirety of Spain by that most Christian king – never to be sufficiently praised – where they had previously held great power in numbers, wealth, and influence. They themselves admit that no event was more sorrowful or grievous than this expulsion. Many perished in shipwrecks, vast numbers succumbed to plague, and the majority died from severe famine. Even for us Christians, while the justice of God's glory in such misfortune was a source of delight, the extreme suffering of the Jewish people evoked compassion and sorrow.

Here is their Messiah. Here is the redemption promised by Abraham the Jew [Spaniard], based on the Mosaic constellation. But before we grant him the skill of prophesising past events more accurately than the future, let us examine the conjunction he attributes to Moses' advent, so that we may see how plainly false and laughable it is. For the very conjunction under which Abraham believed Moses was born occurred many years after Moses' death. Even if we accept his assumptions, the conjunction signified nothing like what he claims.

Let us consider the timing. It is necessary to understand that the Hebrews count the present year, *Anno Domini* 1493, as the five thousand two hundred and fifty-third year from the creation of the world, from which they number their years. According to their reckoning, from the creation to Christ they compute three thousand seven hundred and sixty years.

Since Abraham claims that the conjunction, after which Moses was born three full years later, occurred in the year 2365 from the creation of the world, it follows that it took place one thousand three hundred and ninety-five years before the time of Christ.

But according to correct calculation, the years from Moses to Christ amounted to one thousand five hundred and nine. That conjunction occurred one hundred and thirty years after

Moses was born. The number of years is demonstrated as follows. From Moses to the first building of the Temple, as per the third Book of Kings, which is their first Book of Samuel, there were four hundred and seventy-nine years. From that first building to the restoration of the Temple under Darius, five hundred and twelve years. From Darius to Christ, five hundred and eighteen years. This totals one thousand five hundred and nine years, as we stated.

The conjunction preceded Christ by one thousand three hundred and ninety-five years and thus followed the birth of Moses by one hundred and thirty years, but it was not such a wondrous or prophetic constellation that it warrants great contention over its timing. Abraham claims Jupiter and Saturn were in conjunction in the year 2365 from the creation of the world, on the 25th day of the month Idar, that is, February, in the first degree of Pisces according to mean motion. Yet in true motion, in the same year, they were together in the twenty-fourth degree of Aquarius. Let Abraham explain which conjunction he most associates with the kingdom of the Jews and the Mosaic law – whether it be the mean conjunction in Pisces or the true one in Aquarius. If he chooses the true conjunction, he will contradict himself and other astrologers, for that conjunction was a lesser one, as it did not occur at the beginning of a triplicity.

Such conjunctions, as Abraham himself writes, do not signify changes in religions or the coming of prophets, but rather the abundance or scarcity of crops. Perhaps the transfer of power, though only among relatives within a single nation, or indeed even within the same family. Furthermore, in the chart of the conjunction, Aquarius, in which Jupiter and Saturn were located, occupied the seventh house of the heavens – not the ninth or tenth, which signify kingdoms, laws, and the beginnings of new philosophies. If anyone claims this Aquarius poured Moses upon us from its heavenly urn, let him explain why in *Anno Domini* 1226, when Jupiter and Saturn met in Aquarius with a change of triplicity, an event which should be counted among the greater conjunctions, no Moses descended from heaven, no

people were led out of Egypt, no religious law was given, and none of the miracles that occurred under Moses in the wilderness were witnessed again in the world.

But Abraham does not seem to have noted the conjunction that occurred in Aquarius. Rather, he cites the conjunction in Pisces as the one related to the kingdom of the Jews and the Mosaic law. Thus, he draws parallels with that conjunction that took place two thousand eight hundred and forty-nine years later in Pisces, when he predicted the coming of the Messiah as a second Moses. Why do we need refute this further? This was a mean conjunction, that is something fabricated by humans and purely imaginary. We can never sufficiently marvel at the madness of astrologers. Their profession deals with what does not exist, has not existed, and will never exist, yet they derive events in the lower world as though attributing them to real causes.

Ibn Ezra places no trust in Albumasar, since he uses mean conjunctions (occurring only after two hundred and thirty-eight years when one triplicity passes into another), but himself appears ridiculous in his prophetic commentary. He describes the configuration of the heavens at an hour when Leo occupies the Ascendant, Saturn and Jupiter reside together in the seventh house with Aquarius, the Sun moves at the very zenith in Aries, and Pisces holds the ninth house. The significance of religious laws and prophets is sought from the ninth house, and yet no planet at all is found in it.

But with astonishing subtlety, this astrologer manages to transport both the Sun and Jupiter and Saturn from their actual positions into the ninth house. For, he argues, since Jupiter and Saturn were in Pisces according to their mean motion, and Pisces occupies the ninth house, Jupiter and Saturn must be in the ninth house. Likewise, the Sun was in the tenth house according to the division of houses, but Ibn Ezra reasons that if we follow the sequential order of the signs, it will be in the ninth, for Aries is the fifth sign from Leo, and

the ninth house is the fifth house from the Ascendant. Do we suppose even the finest ears of grain more subtle than these convoluted contrivances?

Should I respond, or merely express outrage at such stupidity and madness? Perhaps I should lament the harm done to simpler minds, who – since they do not understand these matters – pass this nonsense along as if it were Scripture, even praising it at times. Often, such individuals slip from error into superstition, and from superstition into unbelief.

Tell me, wondrous Abraham, at what hour were Saturn and Jupiter in Aquarius? Or were they in Pisces? You insist on mean motion. But they were not actually there. If the Sun foretells imperial power from the tenth house, how does it simultaneously declare the brilliance of law from the ninth? Neither does the ninth transform into the tenth, nor the tenth into the ninth, nor can the same planet occupy both places at once.

But enough of this – it is too much already – when Aristotle himself warns that one ought not to argue against foolish opinions.

Chapter Thirteen

Various mean conjunctions are attributed to the Christian law, even without any astrological reasoning.

I have yet to see any astrologer refer the Christian law to a true conjunction, but only to mean ones. Some cite that which occurred in the sixth degree of Aries six years before Jesus was born. Others, that which happened in the last degree of Cancer, which preceded the former by twenty years.

Many problems arise here. What if I were to show that Jesus was born not under a fiery or watery sign but under an earthy one, which can be proven by reason and by the

authority of Abraham and others? That conjunction in Cancer does not signify prophets, since it was neither one of the greatest nor one of the larger ones.

Observing this, one author asks, "Why not say it belongs to Leo?"

The end of Cancer and the beginning of Leo are adjacent boundaries, and it would be the beginning of the fiery triplicity. What a clever invention indeed! For these positions are scarcely five degrees apart, so the effort required to refer this as a triplicity shift is almost non-existent.

But we have laughed enough in our refutation of mean conjunctions. We have already utterly dismissed them, and there is no reason to expend further effort, given that we have sufficiently demonstrated mean conjunctions are no conjunctions at all. That which does not exist cannot act nor signify those things which do exist.

If, however, astrologers bring forth some true conjunction after Christ was born, I will be astonished only if we are to believe the heavens stood still after He came into the world. Jupiter, Saturn, and other planets come together and move apart repeatedly, but no astrologer ever claimed these conjunctions influence events that have already passed. They are said to precede their effects by many years, but never to follow them.

This is a reasonable statement, for if events are caused by these conjunctions, the cause cannot come after the effect. If they are meant to signify, it would be useless for celestial signs to foretell something that has already happened.

Chapter Fourteen

The commonly accepted nativity chart of Jesus is not true. Nor does it indicate that He would either die a violent death or be a great prophet.

The tales spun by these little diviners about the nativity of Jesus move many. For instance, that He was born with the first face of Virgo rising (how they refer to *decans*), about which Albumasar writes: "in it, a beautiful Virgin holds two ears of grain in her hand and nurtures a child, which some people call Jesus."

Thus, astrologers believe they have confirmed the miracle of the Incarnate Word through their science, finding the Virgin and Jesus among the celestial images.

I am not particularly angered by this. They are accustomed to confirming their doctrines with such testimonies, thinking we will gladly accept such a tale to strengthen our own beliefs. But Christian Truth does not need these fables and dreams, for even the serious inquiries of philosophers seem like fables in comparison.

Who has seen these images? To whom did reason, without the aid of the senses, reveal them as hidden truths? Where did Ptolemy or any ancient author mention them? It is sheer nonsense, an Arab invention, though astrologers claim it derived from the Indians. We will argue more extensively against this in the following book.

Nor was Lord Jesus born with Virgo rising. Otherwise, He would have appeared in the world nearly two hours before midnight, whereas according to the tradition of the Church, we know He was born at midnight. Therefore, it was not the third part of Libra, as some say, but rather the tenth, which rose when the most eagerly awaited of all children was born, occupying the Ascendant.

Hence, the claim astrologers spread with blasphemous words – that Mars was in the house of death in His nativity, signifying that He would die by crucifixion – is also proven false. Mars could not have been in that position unless we make Virgo the Ascendant, which was not the case at the time of His birth.

Yet some might insist that if we remove Mars from that part of the sky, we would place him in the west, where the war-planet would still threaten a violent death. But without

departing from astrological principles, I will show that with this nativity, a violent death is not foretold. For although Mars in the seventh house endangers the life of the one born, Julius Firmicus Maternus writes that this misfortune is diminished if it is a nocturnal nativity, or if Mars is in its own house, bounds, or exaltation. Even more so if it is found in the eighth house, where no clearer sign of death could be indicated.

Furthermore, the benevolence of Jupiter counteracts the malignance of Mars if Jupiter is in the Ascendant, and if the Ascendant itself is the house of Jupiter or Venus, with Venus being favourably connected to Jupiter by aspect.

In the nativity of Jesus, not just one or two of these conditions were present, but all of them. He was born at night, not during the day; Mars was in Aries, its own house, and the Ascendant was Libra, the house of Venus, which Jupiter illuminated in a partile aspect. Venus in Aquarius was joined by the benevolent association of a trine ray.

Moreover, the Moon, which governs the night in a nocturnal nativity, held the house of death favourably; a good death must be pronounced from this position of the stars. For the Moon was in Taurus, that is its own exaltation, and it increased in light, and in the place where it delights, that is, the eighth house, it flowed down with the most favourable sight of the Sun to Venus, with whom it was a guest. The Moon was afflicted by no rays from either Mars or Saturn, neither departing from them nor moving towards them, and was bound by no bond of association with the malefics. Venus, the ruler both of the house of death and of the Ascendant, was also struck by no hostile ray from Mars or Saturn. Rather it was nourished by the rays of Jupiter, promising a good end.

Therefore, He offered Himself because He willed it, not because the fury of the heavens drove Him to the punishment of the Cross. But for rash and shameless men, there can never be a lack of occasion for prattling. Imagine Mars anywhere, and they would have no less cause for delusion.

If Mars is posited in the Ascendant, the face would be seen as stripped, beaten, and disfigured with blood, and that Martian man would be said to have brought swords of destruction upon himself. If in the second house from the Ascendant, poverty and the lack of all things. If in the third, no brothers. If in the fourth, no inheritance, as David's son did not attain even a temporary kingdom, though he was the son of David. If in the fifth, no children. If in the sixth, all his servants would be given over to death. If in the seventh and eighth houses, you have what they say – violent death. If in the ninth, oh blessed astrologers, it would be as Maternus says. He who had Mars in his own house, in the ninth region of the sky, would become a man of terror to good daemons, and the spirits of evil daemons would flee before him. By his mere presence, the suffering would be ended, not by word but by the mere manifestation of himself.

How many do you think would applaud these proclamations, spreading the astrologers' fame, if by chance the star of Mars had been placed there at the birth of the Lord?

If Mars had occupied the culmination of the sky, they would have announced earthly rule as being immediately subject to His law, especially since Jupiter would occupy the first cardinal point. If they had found Mars in the eleventh place, they would have brought forth the Charlemagnes, the Constantine the Greats, and all the Caesars who fought for the Christian Church. If Mars were in the twelfth house, they would have searched for the ambushes of enemies, among whom they could place themselves, insane as they are.

But listen to what they say about Saturn.

Saturn was in the ninth region of the sky, in the sign of Gemini. They say Saturn makes prophets and priests. What about retrogression? This should certainly diminish such promises. Saturn would make a prophet, but not more than a prophet, like, say, John the Baptist. Could Saturn make the divine inspirer of all the prophets?

Saturn was in the same place and in the same sign when Eleonora, the daughter of my brother Galeotto, was born. A most chaste maiden and of the most upright morals, but neither an Anna, nor a Deborah, nor a Cassandra.

But persist, I beg you, admirable astrologers. Persist in your proposed doctrine, and let us see what Saturn meant in His nativity. Your Abraham writes in the book *On Nativities* that if Saturn were placed in the ninth region of the sky, He would be a bad Christian. How beautifully your doctrine has been confirmed. Who would dare say that Christ was a bad Christian, who was never a Christian? O ridiculous men, you are never sufficiently ridiculed.

One superstitious fool, said to be a magician, claims that Jesus was born in a stable because Capricorn held the lowest part of the sky. Another says He was a King of the Jews because Libra was the Ascendant; the Hebrews are Saturnian, and Saturn's kingdom is Libra.

Many individuals are born under these conditions, who are neither born in stables nor labelled kings of the Jews. But too much has already been said about these scoundrels.

Chapter Fifteen

That which Albumasar said about Muhammad is false by experiment.

Albumasar, an Arab, attributes the coming of his Muhammad and the law of the Saracens to the conjunction of Jupiter and Saturn, which occurred in Scorpio fifty-two years before the promulgation of that law. He does not need further refutation, since what he prophesied about that law from the same constellation has already been refuted by experience itself. Whenever either good or evil prophets appear, there cannot fail to be a conjunction referring to their arrival, since every twenty years, Saturn and Jupiter always meet.

That such meetings are neither a sign nor a cause for prophets is indicated by the fact that similar or even more powerful constellations often recur, yet no prophet, no new law, and

no change of religion follows. They say Muhammad appeared after Jupiter and Saturn met in Scorpio. Why did no other Muhammad appear after *Anno Domini* 1065, when Jupiter and Saturn met under similar conditions, with even a change of triplicity? Moreover, in the conjunction preceding Muhammad, Mars did not intervene, whereas in 1065, under the same sign, Mars applied itself. Yet if we consult history, we read of no founding of a new religion at that time, much less one drawing nearly a third of the world into its laws.

Chapter Sixteen

In the prophecy of the Antichrist, some deceivers have already appeared, and others will be deceivers in the future.

If astrologers are false, vain, and ridiculous when they write about the history of religions, their nonsense deserves no more credence when they prophesy about the Antichrist, the end of the world, and other such future matters. Some prophecies have already been disproved, such as when Arnaldus and several others predicted that in the year 1345, because of the conjunction of the three superior planets in Aquarius, or in the year 1454, because of the conjunction of Jupiter and Saturn in Pisces, either the Messiah of Abraham or the Antichrist would appear.

Others placing these events farther into the future, I have no doubt, will be refuted by the same reasoning. Their prophecy will be disproven by events, until the day comes – unknown even unto the angels – that the Lord Jesus declared was not for us to know. Thus the arrogance of all rash prophets is disarmed with a single word, as St Augustine says.

Chapter Seventeen

How lightly the astrologers argue there can only be six religions. That the law of the Hebrews should be called Jovian or Solar rather than Saturnian.

How cleverly, by charming fabrication, astrologers gather together all historical religions and the one that is to come under the Antichrist into a single bundle.

Jupiter, they say, signifies religion, and different religions arise from its conjunction with different stars. There are six planets besides Jupiter, and therefore six forms of religion. Neither more nor fewer have existed or will exist. Jupiter with Saturn produces the religion of the Hebrews; with Mars, that of the Chaldeans, who worship fire; with the Sun, that of the Egyptians, who worship the host of heaven, that is, the stars; with Venus, the Saracen religion of Islam; with Mercury, the Christian faith; and with the Moon, the final religion under the Antichrist, the last of all.

This is the subtle and profound conclusion of many, especially Roger Bacon in his letter to Clement, and also Pierre d'Ailly in his treatise *On the Harmony of Theology and Astrology.*

I marvel at their forgetfulness of their own doctrine. Astrologers are accustomed to say that religions are created or signified only by the conjunction of superior stars, especially Saturn and Jupiter, but now descend all the way to the Moon, which shall supposedly birth the Antichrist.

If they wish to count religions according to the number of planets, they must either remove a planet from the heavens or borrow more from elsewhere. Otherwise, the number will not match. Either astrologers regard idolatry as one single religion, or they count each form of idolatry separately, according to the rites and practices of those who serve idols.

If they prefer the first option, they must remove one planet from the equation, since the religion of the Egyptians would not differ from that of the Chaldeans. It would be one and

the same, that is, idolatry. Therefore, there would only be five religions: idolatry, Mosaic, Christian, Muhammadan, and, so to speak, Antichristian.

If they count the forms of idolatry separately, there are scarcely enough stars in the sky to match the religions on Earth. Even if they reduce such forms to principal types, one involving the worship of fire and the other the heavens, astrologers would rightly earn the wrath of demons for neglecting them in their classification, since demons were especially and almost exclusively venerated in idolatry. The pagan gods of the gentile nations were demons.

Thus, there would be at least three types of idolatry: that of the heavens, demons, and the elements. Astrologers must borrow an extra wandering star – pardon, a wandering error – indeed, another planet, to find eight in total and match the number of religions.

But they are poorly informed. The worship of the heavens was peculiar to the Chaldeans, as Iamblichus writes, while the Egyptians were more preoccupied with the worship of demons. Give the Sun instead of Mars to the Chaldeans and find some diabolical planet for the Egyptians. I could tolerate their constant battles with the truth – truth has never been their friend – but why are astrologers so often unwilling to agree with themselves?

Were astrologers to examine their own doctrines carefully, they would find no reason the law of the Hebrews should be associated with Saturn rather than the Christian faith. Indeed, that law ought to be referred to the Sun or Jupiter, whereas ours should be assigned to Saturn. Saturn does not bestow material goods but rather takes them away; it grants spiritual goods and those unseen. The Mosaic law promises and grants material goods. Our law removes these rather than provides them, promising and delivering spiritual goods and things invisible.

Saturn does not produce mighty kings, army commanders, wealthy men, or those rendered noble by abundant offspring – such as the leaders of the Hebrew religion: Abraham, Jacob, Moses, Joshua, Solomon, and David. Rather, Saturn makes the ignoble, the poor, the

hermits, the despisers of pleasures, and those who meditate on eternal things, scorning material possessions. Such people follow our leader Jesus Christ, and the apostles, martyrs, and Christian monks – those whose lives, teachings, and blood birthed and nourish our religion. If there is harmony between religion and the stars, we Christians must be called Saturnian, the Hebrews Solar or Jovian.

What led astrologers to their mistaken opinion is the observance of the Sabbath. Since it is considered the day of Saturn, it seemed obvious to declare the Hebrews a Saturnian people because they venerate the Saturnian day. By the same reasoning, astrologers call our religion Solar because we observe the Sun's day, which we call the Lord's Day. But why do we not belong to Mercury's day, since astrologers also assign us to Mercury? Recall they give the Sun to the Egyptians and Mercury to us. Albumasar says Jupiter with Mercury signifies the Christian religion, although he also says the same of the Sun.

To err or change one's opinion is no fault among those who are so closely tied to the errors and movements of the planets. In that dizzying, rapid whirl of the heavens, astrologers, stupefied by its observation, scarcely ever stand firmly on their feet.

However it may be, this profession has strange reasons by which they confirm their discoveries. They did not recklessly refer us to Mercury, but because, as Roger Bacon says, Mercury's movements are difficult to understand – Bacon claims the teachings of Christian religion are almost unbelievable and their discoveries the hardest to recognise.

Younger thinkers have suggested that Mercury is the scribe of the gods. Since there is a great abundance of books among Christians, the Christian religion must rightfully be considered mercurial. Such is the marvellous wisdom of astrologers. They have, of course, forgotten the libraries of the pagans, and the books of the Arabs and Hebrews they have scarcely ever seen.

Here ends the fifth book of Giovanni Pico della Mirandola's Disputations Against Divinatory Astrology.

Disputations Against Divinatory Astrology

By Giovanni Pico della Mirandola, Count of Concordia

Book Six

Chapter One

How one must proceed in overthrowing the foundations of astrology. The impossibility that all the stars should ever be restored to the same positions they once occupied.

We have wandered from the intended structure of our commentary, whereby the roots of the astrologers were to be torn out before we attacked the lofty canopies of great conjunctions, great orbits, and other such things; the idea being that once the foundations were removed, the rest would collapse. Who would trust those who, through great conjunctions, make pronouncements about the change of kingdoms and religions? When Jupiter and Saturn are in conjunction in Aries, Leo, Cancer, or Sagittarius, the alleged effects either do not exist, or, if effects do exist, they are not those indicated by astrological calculations.

Furthermore, Saturn, Jupiter, and the other planets do not bring about events in the lower world. If they achieve anything of this kind, nothing concerning their effectiveness has been discovered by nature, perception, reason, or experience. Since one effect appears to arise from one conjunction and another from a different conjunction (if indeed any effect comes from them), the validity of astrological conjecture cannot be demonstrated, given that even among the profession, the basic principles of this art are still in doubt.

We shall see that it is not yet agreed upon what time is to be considered the hour of conjunction, whether it is the beginning of the year in which it occurs, or rather the moment

when the stars themselves come together, and that neither of these times can be accurately determined by astrologers. Therefore, we shall see that the chart of the conjunction remains uncertain. Even if the chart were certain, the method of constructing it remains unsettled, and it is unclear where to correctly place the beginnings of the twelve houses. Even if the twelve houses are placed correctly, astrologers still do not know the power of each house – what part is the beginning, what part the middle, and what part the end.

Since astrologers are ignorant of the region of the sky in which the conjunction occurs, they cannot know the effect of a conjunction, since the variety of significations is reduced to the nature and properties of the houses, which they call domiciles. In major conjunctions they are accustomed to observe which planet is exalted over another, yet we shall see they do not know what this exaltation, which they commonly call elevation, truly is. Moreover, it matters greatly which planet rules in the place of the conjunction of the superior stars, or in the place of an eclipse, and yet we find even this remains unclear.

The laws, dominions, and authorities of the planets are so disputed there is scarcely any part of a single sign about whose ruler and lord anything certain has been agreed upon among astrologers. But it is necessary first to enumerate the foundations of this art, so we will later overthrow them. Along with this, everything astrologers dare pronounce concerning great conjunctions and other divine marvels must also collapse into ruin.

Indeed, since they most grievously offend against religion, any delay in curing this plague seems to be slowness itself. Especially since, if the part concerning great conjunctions were proven false, it would appear the entire edifice of astrology could be most effectively refuted without undermining anything else. Thus, their strongest and mightiest claims could be attacked at this very point.

Now, returning to the subject at hand, we shall uproot the first foundations of this art in the proper order.

Nor should we pass over in silence a certain error widespread among astrologers, into which Albumasar and many others have fallen, imagining that all stars will eventually return to the same places, with the same arrangement of the heavens and the same relative positions of all celestial bodies. From this, astrologers believe the same things which once were will exist again – the same people, the same events, the same animals, and the same condition of all lower things.

When astrologers, delving deeply into this fantasy, examine it more closely, they whisper among themselves that *this* is the resurrection of the Christians, which both the Hebrews and the Muslims also expect. Certainly, those prophets were the greatest astronomers, but they concealed these mysteries from the people and the unlearned. The astrologers believe there is a common number of years of the world and of days, by which the positions of the planets and stars might be fixed with certainty. When this number is completed, all the stars return to the exact same point, and all things to the state they once had.

It is not necessary to refute this madness at length, since Haly Avenrodan himself, in his commentary on the first book of the *Apotelesmata* (Ptolemy also disdainfully rebukes this idea) says there is no one skilled in arithmetic to whom this error would not be obvious. Later, Nicholas Oresme, a most acute philosopher and diligent mathematician, in his treatise *On Proportions of Proportions*, demonstrates with mathematical reasoning that this opinion is false and impossible – the same configuration of the heavens and stars could never return to a position that had previously existed. Since he fulfils this task most sufficiently, I thought it right to refer the reader to him, lest we merely repeat his labour.

Chapter Two

The reasons by which astrologers say the influences of the stars vary. How those things are universally absurd.

The foundations of astrology are destroyed, if it is sufficiently proven that nothing particular is done by the heavens, and that the things supposedly indicated by celestial observation (whence astrologers claim to make predictions) are nothing of the sort. Among the arguments we used, one concerned the imagined instantaneous change of celestial influences. We touched on this in a previous discussion, but justly postponed its full explanation until now. It requires a proper treatment, and has great importance in the overturning of astrology. From this argument, we not only confirm what has already been proven – namely, that the stars do not produce particular changes in things below – but if these things do originate from the heavens, they arise in a manner that cannot be detected or signified by any celestial observation.

Astrologers say the power and influence of stars and planets varies from hour to hour and from moment to moment, depending on whether they are in different places in the sky, (modern astrologers call these locations 'houses'), or in different signs (of which they claim there are twelve), or whether the planets themselves, separated by various intervals of distance, are connected by different relationships with one another, which they commonly call the 'aspects.'

These are the chief means (leaving aside certain others used by younger practitioners) by which they believe the power of celestial influences vary. That is, the diversity of houses, signs, and aspects.

Unless this view is defended, astrologers cannot sustain their doctrine about the efficacy of the stars, or that all change and diversity in things below proceeds from the stars. For if the stars always possess the same immutable power – as we think they do in everything

save the Moon – then necessarily the same or similar effects would always arise. Since astrologers cannot, as we ourselves do, attribute the diversity of effects to inferior causes, they must either concede they can divine nothing of this diversity from the heavens (although the heavens are regarded as our author and cause), or they must claim there exists as much diversity in the heavens as there is variety in the effects of things below.

The multitude of stars provides them no support, because no matter how many stars and planets there are, all are present for any person being born. Therefore, no reason can be offered as to why the stars would act differently for some people and not provide the same influence for all, unless astrologers invent some notion that the power and efficacy of the stars are different at different times. Then they might easily conclude that things which arise at different times are subject to different conditions of the heavens, depending on the state of the stars. They could foretell these things if they knew and explored the state of the stars at any given time.

This is what we will refute in the present book, since nothing is more absurd or more contrary to reason than to imagine there is great inconsistency and mutability in the nature of the celestial bodies, to a degree even greater than what is observed in the inferior things – things which are, by their nature, most subject to flux and change.

What is this most fickle change, this inconstancy like that of a chameleon, that in a short span of time renders these most divine bodies so variable? What are these properties of sidereal influences: do they arise from the very nature and substance of the stars, or from some external force imposed upon them, whether from the twelve celestial houses, the signs, or mutual radiations?

If astrologers answer the first, these properties cannot change unless the very substance of the stars themselves is changed – which even they (I believe) will not concede.

If they prefer the second, then celestial bodies would be the most ignoble of all bodies, doing nearly nothing from their own nature, but instead acting entirely at the whim of external force and influence. For a corporeal substance is all the more perfect, the more its operation flows forth from the innermost essence of the one acting.

We speak in broad generalities. But the madness of this opinion will become most evident when we examine in detail the means by which astrologers believe the virtues of the stars are altered. Then we shall follow the sequence of their errors and fables. Let us now undertake this task, beginning with the twelve rulers of the heavens, from whose diversity they most fancifully imagine the intensity and diminution of celestial influence arises, and that entirely different and utterly varied emanations flow from the signs and stars.

Chapter Three

The houses of the astrologers, which rest on no foundation whatsoever. How the astrologers themselves war with one another in explaining their powers.

The twelve celebrated houses are known to all not completely ignorant of the art. Nearly all meaning and attribution of influence ultimately depends on them. If you inquire about the nature of a planet – what it produces and governs – astrologers will offer no definite or certain response, except according to the nature of the house in which the planet is found. General claims about the properties of planets tend to conform to multiple factors classified under broad, varied terms.

What is more general than saying a planet is ‘good’ or ‘bad,’ meaning it is a source of good fortune or misfortune? Yet even this depends on the house: a beneficent planet in a bad place causes harm, while a malefic planet in a favourable house brings benefit.

Consider Jupiter. Its position in the east differs greatly from its position slightly beyond the eastern horizon, in what astrologers call the twelfth house. The difference between these placements is as great as between fire and air, or water; or between a hare and a donkey, or a donkey and an elephant.

In the east, Jupiter always promises great good, yet when it moves into the twelfth house – adjacent to the eastern horizon – it often portends great evil. Though generosity and divine favour are most associated with Jupiter, in the third or eighth house, it frequently dissipates wealth, despite its general influence of nobility and wisdom. In the eighth house, it creates obscurity and madness, as Maternus says, where fury leads to insanity. Lastly, what is more characteristic of Jupiter than being beneficent and loyal? It is even called the great fortune of the heavens. And yet, when placed in the third house, Maternus declares, it is neither good nor bad.

When positioned in the sixth house, Jupiter brings great evils. Maternus, in providing an explanation, adds that the sixth house possesses a peculiar prerogative of malice. Whatever star occupies the sixth house, will derive its greatest destructive power from the malign nature of the position. Thus speaks Maternus.

Let us then inquire of the astrologers: whence arises this sudden and perpetual fluctuation in celestial bodies, when the firmness and immutability of their substance should, by right, hold to their inherent nature and remain always similar? Only two explanations seem possible for this phenomenon.

The first is that the places themselves possess innate powers and influences, which they transmit to the stars positioned within them – an idea suggested by Maternus' words.

The second is that the planets themselves neither receive influence from elsewhere nor change their nature, but rather that, just as the angle of a star's rays towards the Earth alters with its position, so too the power and effect may vary accordingly.

Both answers prove irrational.

If astrologers claim forces flow from place to planets, we will ask what they understand by ‘place.’ Do they think, as some ancients did, that ‘place’ is a space devoid of bodies? Or do they agree with Aristotle, who defines it as the outermost surface of the surrounding body? If they mean space or interval, such intervals possess no powers or properties, since natural forms do not arise from mere measurements or empty gaps. If they mean the outermost surface of a surrounding body, such a place might have some influence – as much as the body whose surface it constitutes and which it bounds.

But what kinds of bodies are these, whose outermost part would be considered a ‘place’ for the stars? Whether the outermost sphere of all, or the sphere nearest and contiguous to each star, every such body would encompass both the eastern and western horizons, the zenith, the nadir, and all points within the daily rotation of the heavens. Therefore, if any power originates in these parts, the power of the east would not always be the same, nor would the power of the west, but would change according to the nature of the body currently occupying that position.

The twelve signs, distinct from the houses, are also said to exist within these houses, just as planets are said to reside in both houses and signs. These signs derive their influence from the outermost sphere. Just as planets change their influence based on the house they occupy, signs like Aries produce different effects in the east than in the west. The same applies to signs located in the eighth sphere or in what is considered the highest sphere.

Since these signs are not enclosed within any corporeal substance, we cannot conceive of any influence belonging to the houses, other than that of the immovable space or interval occupied by bodies. However, according to Aristotle, such a space is either nothing at all, or if it is something, it bears no mark of efficacy or distinctive property.

Therefore, to imagine diverse influences exist in these locations, in the varied positions of signs and planets, whereby the stars situated in those places are affected, is entirely contrary to reason.

It would be no less absurd and ridiculous if astrologers were to adopt the alternative defence, that different effects arise because planets face us differently depending on their position, sending their rays to Earth in varying ways. Anyone who has even lightly studied optics or basic philosophy will recognise how nonsensical this is, since it is well-known that the quality of an effect depends on the quality of the ray and the nature of the body emitting it, not on the changing path of the ray's projection.

The cause of intensity in effects might lie in the manner of projection. The rays of the Sun, regardless of how they reach us, always heat and illuminate. Yet when the Sun is closer or more directly aligned, it heats and illuminates more strongly. When its rays are slanted, refracted, or come from a more distant point, they produce the same effects as when they are direct and near, only less intensely.

No other variation in effect is possible besides that which follows the strengthening or weakening of heat and light. Thus, it is sheer madness for astrologers to believe the twelve signs of the zodiac and the planets, positioned for one moment, can bless or curse us as though they were our brothers, but lose all power and significance if they move a short distance away – giving wealth in one place, taking it away in another; bringing friends here, stirring enemies there. All this happens, astrologers claim, not because the nature of the sign or planet itself changes, but solely because of the difference in position.

However, whether the rays draw closer to us, exert greater force on the Earth, rise or set in the east, sharpen or weaken, they cannot change their nature. Therefore, neither can the result of the rays' influence change in kind, though the mode of their operation may differ, either more firmly and effectively, or more weakly and feebly. Since the powers and

properties of things, whether they are like those of the elements or more hidden, follow the nature and kind of the thing itself, a nature that remains unchanged cannot itself transform so that its powers become different. This is entirely impossible.

If astrologers claimed to observe these effects, their conclusions might have credibility if experience confirmed them, or if they were at least in agreement with one another. But they disagree even on which qualities certain positions signify. In this way, astrologers undermine the credibility of their own observations by contradicting each other.

For example, the Arabs, and the Latins who follow them, argue that the sixth house determines the quality of one's servants. The Egyptians derive adverse health or sickness not from the sixth house, but from the twelfth, which is as far from the sixth as possible. Ptolemy seeks signs of illness more in the seventh and first houses. He never uses the sixth house for this purpose in his prognostications, while he always uses the first and seventh, contrary to common astrologers.

Some astrologers omit the sixth house entirely when searching for such indications. They use it, instead, to determine the characteristics of future children. Meanwhile, the Arabs and Latins assign that meaning to the fifth house. Ptolemy uses the tenth and eleventh, and when life for each individual is not prolonged, the fifth and fourth. Paul of Alexandria also observes this. Marcus Manilius determines the fortune of children and the desires of parents from the east. Porphyry says children are especially signified from the tenth house, because from that place souls are sent down into bodies, and thus one story confirms another. Ptolemy does not derive the fortune of parents from anywhere, while the Arabs use the fourth house, and Heliodorus the sixth. Other astrologers, as Haly Abenragel reports, derive judgement from the ninth house.

The second house, according to Paul of Alexandria, signifies sudden events and personal risks. Among younger astrologers, this house means nothing but riches. Ptolemy in

the *Apotelesmata* derives no judgement on riches from the second house, nor from any of the twelve. But Heliodorus draws significations from the third house regarding such matters.

Regarding marriage, almost all astrologers make predictions from the west (the seventh house). Heliodorus also from the midheaven (the tenth). Ptolemy neglects both.

Journeys they judge from the ninth and third regions. Heliodorus also includes the seventh, while Ptolemy, investigating these matters, disregards ninth, third, and seventh equally.

For parents, Heliodorus uses the fourth, Maternus the tenth. Ptolemy judges from neither.

For friends, most astrologers predict from the eleventh, Heliodorus also from the third. Ptolemy from neither the eleventh nor the tenth.

Religion is assigned to the ninth by various writers. Manilius assigns it to the seventh, which he also calls Pluto's harbour, a term the Egyptians use for the second. Manilius also places Saturn in the fourth house, contrary to the opinion of others who place it in the twelfth.

Manilius claims to imitate the doctrines of the ancients, though none older than he ever emerged among the Latins as a narrator of celestial matters (or, more truthfully, of fables). His teachings about the twelve houses are altogether different from those now current, to the extent the entire method of prediction is now thoroughly changed. He places Mars in the west (seventh house), while others assign it the first seat below the west.

Are not the other locations of the twelve heavens, as taught by Manilius, altogether different from every form of astrology now in common use? Have astrologers not altered the entire system of prediction?

Fortune is the first lot given. This one is judged by art

And reckoned by title, because it contains within itself what is nearest:

The foundations of the home, and all that flows from the home.

The ordering of the servants, the acreage of the fields,

The tasks, the great works, are foretold

Amid the harmony of the shining stars.

Thence follows the place of war. That which pertains to arms

And those roaming the walls of far-off cities

Is encompassed beneath one title.

The third station is to be counted for urban labours

This too is a military service, composed of civil actions

It holds the bonds of fidelity and obedience

It forms friendships and often the fallen vanity of duty

And teaches what rewards of honour may be attained

When the world works in concord with the stars.

Nature has placed the law of judgements in the fourth

And the fortune of the court: the advocate pouring forth words

The defendant depending on the tongue and lips of the speaker

The judge unveiling the hidden secrets of law to the people

Resolving disputes with an open brow,

Seeking no more truth than the advocate himself.

Whatever eloquence achieves among proposed laws

And brings about, all of this has been assigned to one part

That obeys the government of the ruling stars.

The fifth station is dedicated to marriage through the signs

It holds allies and entrusts the rights of hospitality,

It joins in bonds, uniting friends with alliances.

In the sixth station, abundant wealth is accounted,

Along with it, the safety of things. One teaching how much

They may be used, the other how long they shall endure

As the stars release their strength and govern men.

The seventh is judged dreadful, with cruel dangers,

If the stars positioned in the signs bear ill influence.

Nobility holds the eighth, where honour stands

And the measure of fame, and birth, and grace.

The ninth station encompasses the uncertain fate of children

And paternal anxieties,

And the mixed throng of nurses and infants.

Next is the one that contains the action of life,

In which we determine character, and how every

House is shaped by examples, and how, in due order,

The servants depart to their assigned tasks.

The eleventh part is especially placed in destiny,

Which always governs the height of our strength,

And where health resides, now free from disease,

Now afflicted, as the stars move the world.

There is no other place, time, or kind of healing.

It offers aid at its appointed time,

It mixes the juices of life for health.

The last encloses the whole in proper order,

It is the labour for attaining things, which includes all

The outcomes of wishes, and what each person

Proposes as their pursuits and skills, that these may not fail.

Whether it bears the task of every pleasing nod,

Or attempts harsh disputes in the forum through lawsuits,

Or seeks fortune at sea and follows the winds,

Or entrusts Ceres in full harvest,

Or seeks Bacchus through rich-flowing must,

In this part, days and moments will be given,

If the stars align well through the following signs.

Thus writes Manilius, whose opinion indeed differs entirely from current astrologers. I believe this has not been understood by any of his erstwhile interpreters and followers.

Given such great variety of opinions, what certainty can there be from experience? Especially when another major uncertainty is added – namely, how the beginnings and boundaries of the houses are to be divided? Different people have different views of that too, as we will explain in another book. This ought to have been settled before any attempt at observing the properties of celestial houses.

Alas, it is far is it from certain that any astrological observation can be proposed with reasoning sound enough to force us into agreement. Whatever Ptolemy and the rest may have believed, we conclude that either the existence of properties in celestial houses is ridiculous and false, or that the influence and efficacy of the planets is altered and modified by their variations.

Chapter Four

Concerning the twelve signs: they were fabricated by mathematicians for the sake of ease in calculation. Also, astrologers err greatly in many ways concerning the signs.

Astrologers uphold the division and boundaries of the signs as though they were prescribed by the laws of nature. Two planets supposedly have more interaction if placed in the same sign, even when twenty degrees apart, than if one occupies the last parts of Aries and the other the beginnings of Taurus. Though separated by immense space, between the planets in the former case there falls not even the breadth of a transverse finger.

To claim this number of signs is not invented by mathematicians for ease of calculation, but rather determined by nature, and established by philosophical reasoning – such as that offered by Albumasar, which states there are twelve signs because there are four elements, each divided into three parts (beginning, middle, and end)… this reasoning is just as ridiculous and frivolous as the mathematical one.

It can easily be demonstrated, as we previously showed with the testimony of Haly Avenrodan and Ibn Ezra, that the authors of this division were not moved by such conjectures at all. For if that conjecture holds in the signs, what is to be said of the division of the signs into thirty degrees, or the partition of the degrees into sixty minutes? What philosophical reasoning will they provide? How will they defend the work of the mathematicians who, far from considering any natural properties, only sought numbers more suitable for calculation?

Thence arises the deception of astrologers, or a definite cause of error. They pronounce judgements as if these divisions had entirely separate powers, and as though it was not human judgement, but rather nature itself, that divided them.

They attribute various properties to different parts, and even to the minutes of the same sign. They declare some parts bright, others dark; some associated with the Sun, others with Mars, and still others with different planets. They speak so fancifully about these minutes that Asclepius devised a table (concealed by Maternus as a mystery) in which he reveals the influence each minute possesses according to its partitioned property.

Just as the numbers used in calculation are the result of mere human agency, so too is the primary division of the zodiac into twelve signs. The signs have no other origin. Regardless of how this division is understood, we have already demonstrated that it holds no inherent efficacy. Thus the madness of astrologers is refuted, as they believe a planet is altered based on the condition of the sign it traverses.

Astrologers establish the domiciles and exaltations of planets in relation to these signs rather than the constellations, notwithstanding that, as we showed in the previous book, these signs can only be conceived mentally and have no physical reality. The Chaldeans did not use signs, and also did not attribute any planetary domiciles. Among them, Leo was not the house of the Sun, nor Cancer of the Moon, nor Libra of Venus, nor Taurus of Venus or Pisces and Sagittarius of Jupiter, and so forth. They observed only the exaltations of the stars, relating them not to the signs but to the constellations.

For the Chaldeans, Saturn held no power in Capricorn, nor in Aquarius, but only in Libra and Scorpio, for although these are two signs, they were regarded by the Chaldeans as a single constellation. Otherwise, if Ptolemy and others related the houses of the planets to the constellations rather than the signs (which they do not), the reasoning would not align. Mars has the greatest affinity with the stars that make up the Taurus constellation, to such an extent that no other planet has more, yet Mars is said to be in its fall when in Taurus.

Houses, exaltations, aspects, trigonal relationships, *monomoiria*, *decans*, *hydroposopias*, and other such affinities between planets and zodiac, derive from the signs. Therefore, no power can come to the planets if these are entirely imaginary, being neither natural nor effective. One can only marvel at those who construct astrological opinions based on the supposed similarity of planets. They assert that the planets emit the qualities of the zodiac, in which seeds are scattered, just as plants reflect the flavour of the earth. But this is quite different. Plants are nourished by the earth and therefore reflect its flavour, while

planets are not nourished by the zodiac. Indeed, they are not affixed to the zodiac, like plants and shrubs to the earth, but are separated from it by an immense chasm and interval.

Panaetius of Rhodes and Plotinus mock those who believe a contagion can arise from such a vast gap of space, from the zodiac to the stars. We are not moved so much by the space that lies between as by the nature of the things themselves. True physical and natural bodies cannot be affected by imaginary ones, and luminous stars cannot be changed by non-luminous (to say nothing of non-existent) ones.

But it is easy to see why people are deceived. The Sun, positioned in Leo, heats the Earth more fiercely. When it comes to Aries, as if to restore the world, people consider there must be kinship between Leo and Aries, because as the Sun travels through those signs it becomes stronger and more forceful. Indeed, we experience its greater power annually. Hence they establish Leo as the domicile of the Sun, Aries as the kingdom, and what they infer about the Sun must apply to other signs. Thus, in some signs the planets might be more powerful, and in others, less, and the astrologers have distributed beautifully two houses for each planet, besides the Sun and Moon, with each having one sufficiently royal.

Having decreed that the Sun should take Leo as its house due to its great heat, in which it exerts its power most strongly, it seemed reasonable to assign the house of the Moon to Cancer, since its orbit comes closest to us. As the circle of the Moon is even closer to us, they assigned Cancer as the Moon's domicile.

Based on the positions of the spheres, astrologers distributed two houses for each planet. For Mercury, considered adjacent to the Moon, they assigned Gemini and Virgo. For Venus, they assigned Taurus and Libra. For Mars, they assigned Aries and Scorpio. For Jupiter, they assigned Pisces and Sagittarius. For Saturn, they assigned Aquarius and Capricorn.

These beliefs, even rhetorically, did not establish astrological dogmas with any real probability, and yet they have been handed down with great authority by their successors, so that greater oracles could scarcely be accepted. Those who cling to such dogmas are mistaken – the ideas are criminal, and full of ignorance and intellectual slowness.

That the Sun heats us more in Leo is not due to the sign through which it passes. Rather, the position and location causes it to strike the Earth more directly in our regions. Otherwise, if the quality of the sign were the cause, it would affect all peoples equally, since the same signs are present for everyone. But when the Sun heats the lands situated towards the North, it freezes in Leo among those who inhabit the South. To them, the Sun grows hot as it comes towards Aquarius, whereas it pours ice and the rain of waters upon us. The closer the Sun approaches us, the further it is from the South, and on the contrary, when it departs from us, it turns its course towards them.

Those who care little for facts claim a planet's effects are more or less observed. But if the true principles of the craft have been correctly passed on, one must consider that the Chaldeans observed the heavens for thousands of years in open fields, and never applied such principles to the celestial houses. Why is it that, with such diligent and prolonged observation, they never detected Mars as strong in Scorpio, weak in Taurus, Saturn as powerful in Capricorn, or weak in Cancer? The others should be understood in the same way, and with the same sign being divided into so many sections, with so many *decans*, so many *monomoiria* with the Egyptians, with the Chaldeans assigning the twelve-fold divisions, how is it that no agreement exists between them regarding the boundaries?

Ptolemy neglects the *decans*, which the Indians and Egyptians divide differently, the Arabs do not know the *monomoiria*, the Greeks mock them, and the Egyptians use them in all their predictions. I leave aside the use of the twelve-fold divisions, which, as Maternus writes, is most important among the Chaldeans.

We are told a planet in its own bounds is most powerful, and also in its domicile. The *decan* bestows the bounds, or something similar, in a manner in harmony with the stars. Based on the part of the zodiac, a planet may be found powerful or weak. Add various opinions about the signs referring to the ninth sphere. Or to the eighth. And in the same part, one writer wishes Saturn, another Jupiter, to dominate. Some use the signs which they think are moved, while others use those which are not moved.

Concerning these opinions, nothing has been decreed, nothing has been prejudged. Abraham in the book *On Nativities* argues that a double chart should be made, one for the movable signs, the other for the immovable. With such variety, the whole method of prediction is total confusion. The authority of every alleged observation is weakened, because there is no certainty about these matters.

Chapter Five

The opinion of astrologers on the aspects. How irrational it is.

We have already refuted the opinion of astrologers concerning the signs and the twelve houses of the heavens. There remains a third method by which they claim virtues and influences are altered, namely, the aspects.

Astrologers think if Saturn, for example, is distant from Jupiter by sixty degrees, that is, by two whole signs, it affects lower things differently than if it were distant by ninety degrees, the interval of three signs. In the first case, they say that Saturn views Jupiter with a hexagonal radiation, which they call a sextile aspect, because the space between them is one-sixth of the zodiac. In the latter case, they say it observes Jupiter from a square, because the planets are separated by one-fourth of the zodiac.

Similarly, the properties of each star are different if one is distant from the other by one hundred and twenty degrees, whence a triangular radiation, that is, a trine aspect, arises. Other times, they are either diametrically opposed or meet in the same position or place.

What we have said about Jupiter and Saturn applies equally to all other stars, so their virtues and efficacy are always altered by their varying distances from one another. Astrologers claim this alteration occurs to such an extent that, when the planets are at certain intervals, namely, in a trine or sextile, their entire influence is good and salutary. Conversely, at other intervals, namely, square or opposite aspects, their rays have the most harmful powers, or at least are less beneficial.

From this diversity of intervals not only is the goodness or malice of the influence altered, but also the manner and nature of its efficacy.

These are the ravings of astrologers concerning the aspects of planets. A philosopher would condemn them without further refutation, since this insanity cannot be defended by reason: that the nature and properties of two causes working together could be so greatly altered merely by differing distance and interval.

I ask astrologers this: do such aspects refer to the planets themselves, or only to the effects of the planets? When they speak of Jupiter harassed by the square rays of Mars, or Venus aided by the trine radiation of Jupiter, do they mean the bodies of the planets are subject to good or bad influences? Or do they mean the planets themselves suffer nothing from one another, and experience nothing of these changes? That is, these words describe what planets do to us, and how they move the corporeal things subject to them.

Whether they answer one or the other, astrologers fall into a thousand pitfalls and countless difficulties.

If the planets move one another and engage in friendships and hostilities, now soothing each other with a friendly embrace, now attacking and assaulting in a hostile manner

with the swords of their rays, not only would the divine Job, who writes that God makes peace in His heights, protest, but so too would the entire Peripatetic school of Aristotle. The Peripatetics hold that heavenly bodies are only altered by the variety of their locations. Those qualities found below the Moon neither ascend to them nor depart from them.

If astrologers believe these things, particularly concerning harmful qualities, they deserve outright rejection by every philosophical school, since they appear entirely ignorant of the nature of the celestial realm. Astrologers believe the heavens contain something capable of doing or suffering harm, which is absurd. If any kind of passion is to be admitted in the stars, it must be of a kind that should rather be called perfection than passion. When the Moon is illuminated by the Sun, it suffers only in the sense that someone might suffer by receiving a benefit from another.

For a star to be harmed by another star, or besieged, or corrupted, or rendered weaker and inferior, or for a beneficent star to be made harmful, or a powerful star to be rendered feeble, is as far removed from all truth as the entire nature of celestial beings is from all evil.

If the stars are capable of suffering harm, those more noble and more perfect should not suffer it from those that are ignoble, so at least this conclusion may be drawn: not everything can be affected and moved by everything else mutually, but some things are affected, such that some indeed act only, while others suffer.

Otherwise, how might the Sun, ruler and king of the planets, the source of light and of the supreme power of the heavens, inhabit such a order whereby it too would be weakened by the rays of others, or would become harmful rather than beneficial, and would suffer, even though all the power of the planets derives from it? How could it suffer from its own weapon (as they say), whence all the strength of the planets flows?

But let us assume the planets are affected and moved as astrologers wish. Let them answer this: why do close stars not affect one another, when those same stars, rendered more

distant, sense each other and suffer mutual influence? For this is how astrologers usually define things when speaking of aspects.

If Jupiter occupies Cancer and Mars occupies Leo, with no intervening sign between them, astrologers say the stars of Jupiter and Mars are *asyndeta*, that is, unconnected by any bond of rays or aspects. Yet, when Mars, having moved farther from Jupiter, comes to Virgo, they claim Mars affects Jupiter and Jupiter affects Mars. What could be more absurd or farther removed from all philosophy than this? It is a most well-known principle that anything acting upon another does so more effectively the closer it is to the thing acted upon.

Therefore, this so-called 'aspect', which younger astrologers speak of, and which is nothing other than radiation (as it was also called by the ancients), that is, the propagation of light and power, and (so to speak) a certain emanation… how is it ineffective in things close by, yet effective in the most distant? What persuades astrologers to believe that a ray, depending on whether it comes from a greater or lesser distance, takes on a different nature, as if it were altered in its essence?

If we follow true reason, no other difference can arise, except that the ray reaching the affected planet is either weaker or stronger. But why its property should be altered is a mystery for which no cause can be imagined or conceived.

Even if, due to diversity of intervals, the number of interacting parts is varied, or the planets assume a different configuration of position among themselves, inefficacy of natural things is not altered by diversity of numbers and configurations. Natural powers do not arise from numbers and configurations, but from natural forms, according to the diversity of which the configurations themselves, stable and innate – and not those arising incidentally from motion – are moved and varied.

Nor do astrologers encounter lesser difficulties if they imagine the diversity of radiation does not concern the bodies of the planets but rather their effects. Here the stars

suffer nothing from each other but the diverse proportion of distance means the rays flowing forth are mixed differently, and so varied effects arise from the diversity of the mixture.

To this, we could first object with the authority of Plotinus. Rays flowing forth from the heavens cannot mix with each other so that a new power or form arises, since they are neither bodies, nor liquids. Nor are they qualities affixed to bodies, which undergo something so that they are thereby stained, or are somehow altered according to the condition of their substance.

That philosopher thought such a thing happens less to rays and more to many qualities, namely, that from some blending or mixing they are sometimes transformed into another form arising out of all. This usually means the destruction of the simple and individual qualities flowing together into the same. Such a thing cannot easily be conceived of in the case of rays.

But let us concede to astrologers that rays are mixed. Let them demonstrate how the rays flowing from stars are mixed differently, according to varying distances.

As we have said, this diversity can only arise from the fact that those rays which emanate from closer and more adjacent bodies are more intimately mixed, whereas those which proceed from more remote bodies cohere with greater difficulty. Yet this does not please those who assert there is simultaneously no interaction among the rays of close planets and the greatest interaction among rays of stars separated by the vast and immense regions of the heavens.

Moreover, if the proportion or the diameter of opposition, or the quadrangular or triangular configuration, causes diversity in the property of the rays, this cannot be maintained unless we assert that the bodies of the planets change their condition due to that variety of configurations. The power and property of the rays arise from nothing other than the nature of the irradiating body.

Nor is that diversity of configurations found anywhere other than within the bodies themselves, whence the rays descend to us. The farther these rays travel from those bodies, the less they preserve that relationship of configurations. Touching the earth, they converge into a cone, and those from opposing sources unite into a single convergence.

Therefore, when they mix, they are no longer intertwined with triangular or quadrangular configurations. Their mixture cannot be altered by such diversity of configurations.

Astrologers must therefore claim there exists a property in the rays, such that their stars were arranged with a relationship of configurations. Ultimately, they will claim that the stars themselves vary in nature according to the diversity of configurations, which has already been refuted. Or, if the stars themselves do not vary, astrologers will reluctantly admit the power of their rays remains the same and unaltered.

Chapter Six

The various rationales for aspects are recounted and refuted.

The ancients, whom Maternus imitates, derive the theory of aspects from numbers. They call the stars, separated by a certain number of degrees, ‘joined’ if that number, when multiplied, accounts for all the parts of the heavens.

Thus, an interval of one hundred and eighty degrees produces a diametric radiation, since this number, when doubled, makes up the full three hundred and sixty degrees. Similarly, a trigon (trine) consists of one hundred and twenty degrees because if you triple this number, you again complete all the parts of the heavens. A square (quadrate) radiation requires ninety degrees, which, when quadrupled, sum to 360. A hexagon (sextile) is computed as sixty degrees, which is one-sixth of all the parts.

This reasoning is far too drowsy and sluggish of mind. By the same reasoning, an aspect would also occur at seventy-two degrees, since this number, when multiplied five times, completes three hundred and sixty degrees. The same would hold for forty-five degrees, since this number is an eighth part of all the degrees of the heavens.

But (says Albumasar) these numbers have another rationale. When multiplied, they enumerate not only the parts of the heavens but also the number of signs. In a hexagon there are two signs, in a trigon four, in a tetragon three, and in a diameter six. Twice six, thrice four, four times three, and six times two together make up the number twelve, corresponding to the signs of the zodiac.

This is also frivolous, for by the same reasoning, stars separated by thirty degrees would also be configured to each other, since if you consider the number of degrees, you have one-twelfth of the parts of the heavens. If you consider the number of signs, you likewise have one-twelfth of their portion.

Finally, the causes derived from geometric figures by Ptolemy do not prove the proposition. Such harmonies of figures do not produce different properties in natural things. Those who use them fall into the error condemned by Aristotle, that of treating physical matters mathematically. Perhaps recognising this, Avenrodan says that after Ptolemy presented a mathematical explanation of aspects, he provided another based on nature.

His reasoning is as follows: hexagonal and triangular radiations are beneficial because they arise from signs of the same kind, either masculine or feminine. That is, planets linked by these configurations are arranged such that if one is in a feminine sign, the other is also in a feminine sign. If one is in a masculine sign, so too is the other. Conversely, square and opposing radiations are harmful because they emerge from signs of different kinds.

This reasoning of Ptolemy is not only weak but self-contradictory.

First, because these signs are, in reality, non-existent, as we will reveal in the following books. Second, even if they do exist, they are not marked by qualities or sexes in such a way that some could be called masculine, others feminine, some fiery, others aerial. Finally, whatever their condition, planets cannot be altered by them, as we will demonstrate below.

Let us not dispute these matters but rather demonstrate that astrologers contradict themselves. For if their doctrines are true, the opposing radiation, considered most harmful, should instead be counted beneficial, since it, too, only occurs in signs of the same kind.

Aries and Libra belong to the same kind, as do Cancer and Capricorn, and all the others that face each other diametrically. That Ptolemy fails to see this is truly astonishing. How could a man so intelligent make such an error in a matter so clear and evident? If he had recalled what he had stated elsewhere, he would have understood this reasoning does not hold, but is rather contrary to his own principles.

In the third book of the same work, Ptolemy maintains that among the signs not only of the same sex but even of the same quality, the configuration is sometimes not hexagonal (that is, good) but rather square (that is, bad), as happens when they are oblique (that is, of short duration). Likewise, those of different kinds do not have a square configuration but rather a hexagonal affinity. Thus Gemini and Aquarius are configured with a square radiation, while Taurus and Aquarius are configured with a hexagonal one.

If this is true, how can the goodness or malice of configurations arise from either the affinity or discordance of signs? This difficulty must be faced by all who measure the spaces of radiations not according to the parts of the zodiac but according to those of the equator, something most astrologers observe. Yet astrologers (remarkably thoughtless) always reason about the malignity or beneficence of aspects based on the affinity or diversity of signs.

Albumasar presents a different explanation. He claims the nature of aspects is confirmed by opposition, saying it arises from the fullness of light that the Moon attains when opposite the Sun. Albumasar asserts the square aspect becomes evident in the motion of planets when, being ninety degrees distant from their *apsis*, they change their course. The trine appears in superior planets when, at one hundred and twenty degrees from the Sun, they retrograde if they were previously direct, or move direct if they were previously retrograde. The hexagonal quantity corresponds to half the diameter of a circle, and to the distance of Venus' houses from the houses of the luminaries.

Albumasar patches together a thousand scraps into a single poorly assembled quilt. Seeking opposition from the Moon, the square from the *apsis*, the trine from the superior planets, and the hexagon from Venus, and deriving poor conclusions from everything else.

How is it that, because the Moon is filled with the Sun's light at opposition, all planets are connected to the Sun by this distance and also to one another? If the superior planets change their course at a trine from the Sun, why should this interval have the power to alter the influence of planets – not just the superior ones but even the inferior ones – not only relative to the Sun but among the planets themselves?

Even the assertion regarding the superior planets is not universally true. Mars, as Paul of Alexandria and Porphyry write, sometimes stations itself and begins to retrograde when it is forty-eight degrees ahead of the Sun – not merely at the expected trine but even after completing the square. Meanwhile, if one derives the power of the trine aspect from the supposed change in motion of the superior planets at a trine from the Sun, the trine should be among the malefic aspects rather than the benefic ones. This is because every superior planet is considered unfortunate when in a trine with the Sun, if we believe Paul of Alexandria and Heliodorus. All stationary planets are unfortunate and inauspicious, whether they are at their first station or their second.

This is obviously absurd and deserves to be refuted in even greater detail.

Finally, some modern thinkers have devised another theory based on musical harmonies. They suggest planetary rays either harmonise or clash with one another in a manner analogous to musical consonance and dissonance. Musicians, through reason and experience, have established that the third and fifth notes of a scale harmonise with the first, whereas the fourth and seventh do not. What if planets equally spaced from each other sometimes align harmoniously and at other times discordantly?

According to this view, the hexagonal aspect corresponds to the third, the trine to the fifth, and the square to the fourth. This is because the number of intervening signs mirrors the intervals between these musical notes.

These ideas seem elegant and carry a superficial plausibility, but appeal only to those who merely greet philosophy at the threshold. We will demonstrate they have no efficacy or rationale, and moreover that the computation and similarity do not hold.

Among musicians, one note harmonises or clashes with another, but among astrologers, many intervals (so to speak) are mute to each other, that is, they neither harmonise nor clash.

For example, the second note is counted among the dissonant ones by musicians no less than the fourth, seventh, or eleventh. But among astrologers, the second sign in relation to the first is not discordant but emits no sound at all. The fifth and seventh do produce sound, but are not harmonious. The sixth note among musicians harmonises as much as the third, whereas in astrology, the sixth sign is entirely distinct from the first. In music, the eighth note harmonises as if it were the same, while the eighth sign does not recognise the first at all. Nor can the eighth note represent the appearance of conjunction – it reproduces notes of the same tone. In this supposedly elegant similarity, there is altogether more dissimilarity than similarity.

Chapter Seven

What has deceived astrologers. The lack of observational experience concerning aspects.

In truth, those who first devised this doctrine were not induced by such arguments, but rather they were deceived by certain observations concerning the Moon. When they observed how the Moon, borrowing its light from the Sun, varies according to its different positions, they transferred the same principle to the other planets. Therefore, all the planets, not only by their different distances from the Sun but also from each other, would change their condition and state.

That observers were so led into this opinion may be recognised from this: they established neither more nor fewer configurations among the planets, than those in which the Moon assumes different forms in its positions relative to the Sun.

There are five commonly recognised configurations of the Moon with respect to the Sun: when it is either conjoined with the Sun (New Moon), crescent, half, gibbous, or full. The configurations among the planets (as devised by observers) correspond in equal number. For the planets are seen either together (conjunction), or in a hexagonal aspect, or a square, or a triangular, or in opposition. Conjunction corresponds to conjunction, while the hexagonal radiation corresponds to the crescent shape, which is first observed in the Moon when it is sixty degrees distant from the Sun. The hexagonal radiation among the planets was established by the Greeks. Likewise, the Moon is in its half phase, called in Greek *διχότομος* (‘dichotomous’), when ninety degrees lie between it and the Sun, at which distance the stars are also separated from each other, and are said to form a square configuration.

They derived the trigonal radiation from the likeness of the waxing Moon, which first appears in that form when it is removed one hundred and twenty degrees from the Sun, and is called waxing and gibbous. Opposition itself corresponds to the full moon. Since the Moon, depending on the variation of its shape, also customarily alters bodies in different ways, our observers established the same for all planets – that is, due to the variety of intervals between the planets, the planets would also affect inferior things in different ways.

From this reasoning, astrologers were led to their conclusion, but how much they are deceived can easily be understood.

For if the Moon, depending on its distance from the Sun, changes both its shape and its properties of influence, this happens because, receiving light from the Sun, it is illuminated according to its position and relationship to it. Due to the increases or decreases of its light, the Moon not only presents a different appearance but also alters, in various ways, both our bodies and other things via heat. Who would deny light is the cause of heat?

The more light the Moon has, the more it heats the inferior bodies to which it is close, and consequently, the more the humidities in them dissolve and are liquefied. In this way, the statement of Ptolemy is true, that from the first quadrature of the Moon to the second, the humidities of bodies flow out, because during that time the parts of the Moon facing the Earth are endowed with more abundant light.

Hence, the well-proven observations of farmers show that wood cut when the Moon is full quickly rots, whereas, on the contrary, wood cut when the Moon is waning is immune from decay and preserved from the defect of putrefaction. This is because moisture, which is especially suited for putrefaction, increases and decreases in bodies along with the waxing and waning of the Moon's light.

But to transfer these changes of the Moon – which alone is subject to such a vicissitude of light – to the planets, which shine with their own and ever-unchanging light, is

utterly insane. If the Moon, because it is illuminated more or less due to the diversity of its position, affects us in different ways according to the mode of its light, it follows that the property of influencing in the planets, just as their light, does not change. For by their various distances, whether from the Sun or from each other, the planets are neither impoverished nor enriched in light, but always affect us and terrestrial things in the same manner.

Therefore, whether astrologers have been led to this opinion, or whether they have been moved by the conjectures we first touched upon, it is clear they rely on the most trivial and laughable arguments. And if perhaps they should appeal to experience as their sole refuge – since they are deprived of reason – we may just as well appeal to experience, by which their astrological predictions are daily refuted.

Let astrologers answer this one thing: what true and reliable experiments have been conducted on these matters, when one astrologer has determined a quadrate, and another insists it is a trine? That which one declares a hexagon, another asserts it is a tetragon. Indeed, something may be a trine to one person while to others it is a diameter.

Since this will be discussed at length below, we refer the reader to that section. For now, we merely point out that astrologers not only dispute many things concerning the defined limits of radiations but also their very nature. So much so that Paul of Alexandria and Heliodorus write that the hexagon, which does not exist between the signs and is equally distant from the equinoxes and from the tropics, has the nature of opposition. Furthermore, they claim that opposition is not harmful but mediates between favourable and unfavourable aspects. Ptolemy does not consider the quadrate to be bad nor the trine to be good.

Thus, it is clear that no authority from experience supports astrologers, for in such divergent opinions, where each master asserts their own claim with equal confidence and equal authority, no one can claim the patronage of experience in their favour.

Chapter Eight

What is said about besiegement contradicts what is said about aspects.

Besides those figures and aspects we have mentioned, there are other positions of the stars, both relative to themselves and in relation to the Sun, by which astrologers think forces are influenced and the properties of things altered. Among these there are even some that seem to contradict the former ones.

Astrologers call a planet 'besieged' when it is surrounded on both sides by the rays of malefic stars. For example, if Jupiter is in Libra, Mars in Virgo, and Saturn in Scorpio, or even if Jupiter is also placed there, and Mars from Taurus hurls its rays into Virgo and Scorpio… then, of course, they will call Jupiter besieged.

I therefore ask: do the planets move and affect one another when positioned in adhering signs and close together? If not, the concept of besiegement is abolished. A ray striking Virgo will not harm a star positioned in Libra. Neither will one sent to Scorpio, merely because Scorpio, Virgo, and Libra are neighbouring signs. If astrologers answer in the affirmative, the reasoning behind aspects is null, for the entire premise depends on planets affecting each other from certain intervals, while from others they suffer nothing mutually.

But if astrologers respond that in besiegement the situation is different, since there are rays on both sides, they assert precisely that which most clearly reveals their madness. As if, just as happens with men, a fleeing person would not be harmed by an enemy pursuing from behind, provided an open field lay ahead for escape, yet would be caught by the pursuer if another foe stood in the way, blocking the route of flight.

For example, if Mars occupies Virgo, it does not reach Jupiter positioned in Libra. But it will reach Jupiter if Saturn stands opposite in Scorpio.

What kind of self-consistent doctrine is this, that you call neighbouring signs *asyndetic* and *apostrophic*, in which the stars placed within them have no mutual connection, nor does anything flow from one to the other, yet you call a planet besieged because it is attacked by the rays of malefic planets from neighbouring signs?

Astrologers will not concede that Jupiter is harmed by Mars if Saturn is removed. But if Saturn is added, they will concede it, especially when Saturn arrives in such a way that it cannot itself harm Jupiter.

But as we have said, they have been misled by the analogy of a man under siege, who, surrounded by enemies, has no way to escape to safety.

Chapter Nine

The planets under the rays of the Sun are not badly affected, or, as the astrologers say, burned.

Astrologers also rave delirious concerning the planets' interactions with the Sun. They consider the planets ineffective and negatively affected when lashed by its rays, as if the stars cannot endure the light, and become sick if they are too much exposed.

All celestial light, and especially solar light, is beneficial. Nor, if it is sometimes harmful to earthly things, does this happen other than through a defect of matter. This defect of matter does not exist in the stars – the more the planets enjoy the light of the Sun, the more vigorous and more effective they become. Compared to the stars, the Sun has the nature of a universal cause, whose role is not to weaken the proper nature of particulars, but to strengthen it.

If, during the silence of the New Moon, lower things seem deprived of lunar benefit, the reason is different. The part of the Moon facing us is deprived of light. This does not

happen to the other planets, which shine by their own light. When they are surrounded by the rays of the Sun, they are no less able to act upon lower things.

If astrologers stubbornly insist the power of the stars is overwhelmed and drained by the Sun, the effect ought to be greater the more powerful the Sun is, and the closer the planets are to it.

Both of these conclusions, astrologers customarily deny.

If a planet comes together with the Sun partially and under entirely the same conditions, they consider it most effective. When a star is occupied by the rays in Aries and Leo, the Sun does not harm it, yet in those very places they declare the Sun most powerful.

For, they say, the Sun receives the star as a guest when Aries is the Sun's exaltation and Leo its house. No one who is good inflicts harm upon a guest – as if (and this is their constant mistake) celestial things were to be treated in a human manner, and as if the Sun emits its light and heat not by natural necessity but by some kind of free will.

Chapter Ten

Following reason, and even the authority of certain astrologers, retrograde planets seem stronger than direct ones.

Whoever examines the decrees of astrologers will see they derive from human likeness, contrary to the nature and dignity of celestial things, not from philosophical reasoning but almost from poetic licence. Or else they derive from mere fables and arbitrary inventions, such as assertions concerning images, which we will discuss later, or from certain mathematical positions, which, while mathematicians use correctly, the astrologers perversely transfer to their profession of divination. They have erred most in the division of the zodiac. But this will be discussed later in its proper place.

In this same category is the belief that the efficacy of planets is diminished or strengthened, and that the nature of the things is altered, according to various planetary motions devised by mathematicians. That is, at one time planets move in a direct course, at another they become retrograde, and at another they remain stationary in a state of slowness.

Astrologers claim a planet does weakly what it does when it is retrograde, and does effectively when it proceeds. But they also claim a planet is sometimes beneficial when it moves directly, whereas the same planet is harmful if it moves backwards. In this, you see what could be said against the astrologers.

Heliodorus raises a question against himself in the book of commentaries on Paul of Alexandria, which I will demonstrate with his own words, assigning to him the solution by which he thought he resolved the question, while he actually worsened it. His words in Greek are as follows. We have translated them into Latin, rendering word for word as closely as possible:

"But it is necessary to know this: although the planets are said to move unevenly, in reality, there is nothing unequal or disorderly in the heavens. Rather, all order and all equality are to be found in them. However, this is according to our estimation, so that they appear to move unevenly and sometimes even to stand still. In reality, they neither stand still, nor slow their motion, nor move backwards. They only appear to do so due to the position of the eccentrics and epicycles on which they move, as Ptolemy taught us in his composition.

If someone objects, saying: 'How then are *apotelesmata* different, and why does something either increase or decrease because of planetary motion? Or why are planets said to remain stationary, if they neither truly stand still nor move unevenly?'

We respond that *apotelesmata* – the predictions of astrologers – do not occur properly because of the inequality of motions or because of stationarity. Rather, it happens that the planets, being carried in epicycles, either come closer to Earth or are moved away from it."

Thus spoke Heliodorus. In his work, we receive not only the concession but also the attested confirmation that the stations of the planets produce no effect, insofar as they are stations – that is, they do not alter the efficacy of the planets. Likewise, neither do retrogressions nor direct motions.

Different predictions arise because, due to differences in motion, the planets either approach the Earth or move farther away. It is as if this has a natural explanation: that they affect us differently when close and differently when distant. This, indeed, we also concede.

But if astrologers observe the planets when they are direct, stationary, or retrograding, the opposite doctrine must be established. Retrograding planets should be considered more powerful than when they move in a direct course, and weaker when they are direct, if indeed the only thing observed is their greater or lesser distance from the Earth.

As Haly Avenrodan writes in his exposition of Ptolemy, all reason testifies that the closer a planet is to the Earth, the more strongly it affects and influences us. Every planet, when it retrogrades, approaches the Earth, whereas when it moves directly, it is farther from the Earth. Therefore, a retrograding planet ought to be stronger, not, as astrologers have decreed, weak and feeble.

Chapter Eleven

The head and the tail are the intersections of imaginary circles, endowed with no natural force. The ancients did not use them in predictions, and the moderns do not agree on their powers.

The head and the tail of the dragon, to which the astrological mob attributes so much… who does not see they are empty and fabricated things? Astrologers often slip into error from this cause. Whatever they find noted by mathematicians as necessary for the

measurement of motions, astrologers misuse in prediction, as if such constructs were natural and endowed with the power of influence. Astrologers both devise and invent many things in the heavens, indulging in numbers and measurements, yet these are not founded on any otherwise stable nature.

We have shown this in the signs, which Ptolemy does not consider movable, being enclosed by the solstices and equinoxes. We will show this in the definition of the minute divisions of the signs. Now, in the head and the tail, we shall see the same pattern. For the head and the tail are nothing other than the intersections of two circles, nothing but mere points, nothing but the junctions of two imagined lines, introduced by mathematicians so that they may discern ecliptic locations.

There is no force, no quality or natural efficacy, such that it could be transferred to a nativity. If some planet is positioned there, it may determine something better or worse according to the convenience or inconvenience of the location. But the head and tail themselves, by themselves, can have no power of governing or altering bodies.

The distinguished astrologer Abraham Ibn Ezra in the first book of *The Book of Reasons*, thus writes:

"They also say the head of the dragon is exalted in Gemini and the tail in Sagittarius. But this is vain, since the head and tail signify neither good nor evil. For they are merely the intersections of two circles. The Moon is observed when it is in them, because when placed in the head, it is strengthened by being closer to us; on the contrary, it is weaker in the tail, because in it, inclining towards the south, it is farther from us. The same happens to the other planets when they are found in the head and tail, except for the Sun, which does not incline in either direction. But when you read in the tables that the head and tail are separately noted, know that they neither harm nor benefit, although many think otherwise."

Thus speaks that author. Neither does Ptolemy ever use the head and the tail in predictions, nor will you learn that the ancients used them from Maternus, in whom there is no mention of the dragon's head and tail. If the ancients sometimes spoke of them, it was in no other fashion than in referring to a certain location and position. Hence there was a differing opinion among astrologers, since to some older authorities, both places seemed bad on account of the ecliptic – that is, the path – and for this reason, they placed both among the inauspicious locations. Heliodorus, in one treatise, says: "If the places signifying children are free from unfortunate planets and ecliptic nodes, that is, the head and tail, it is fortunate."

More recent astrologers, if the head is in the place of children, will declare the children to be like young olive shoots around the table. They are led by a different conjecture than the one we previously reported from Ibn Ezra – namely, that planets are more effective in the head because they are closer to us.

This reasoning holds when a planet is in the head, although even without the head, a planet inclining towards us should be stronger for the same reason. But when no star is found there, what can the head give or take away? It is designated solely by our mind. As for those who suspect power is left there by the Moon, no authority has ever claimed this. Moreover, such power could be neither physical – if you consider the nature of celestial bodies and their light – nor astrological, since the Moon traverses the tail equally.

Thus, mere placement and position alone shows how far they diverge from the truth (the Arabs and Latins eventually decreed the dragon's head to be decisive, to the point they believed it adds years to life, governs a certain portion of one's lifespan, and is associated with Gemini and Saturn). But it is remarkable how astrologers contradict themselves, when they declare the head to be the nexus and keystone of all celestial felicity, yet elsewhere claim it is good with the good, bad with the bad, and augments whatever it encounters. Elsewhere, they speak of it almost entirely as an evil.

Alchabitius, who includes the very laws we have just mentioned, lists it among the misfortunes of the planets – if they are with their own heads (each planet has its own head and tail, which the Arabs call *Genzauar*), or if they are with the head and tail of the dragon, the proper designation of the Moon's head and tail. In these cases, especially if they are negatively positioned, they are as harmful as in the head itself. The same author, in his book *On Nativities*, considers the Moon applying to the head as a climacteric sign in the principal places of life, and counts this head and tail among them.

Abraham Ibn Ezra, as we have mentioned, asserts that the Moon is strengthened when placed in the head. We have seen Heliodorus count it among the infortunes of the stars. The same author, in his treatise on climacterics, also counts it among the Sun, the Moon, the Ascendant, and the Part of Fortune, so those making pronouncements about this head seem to have done so without any real basis, or at least without any careful thought. Yet everywhere, astrologers maliciously call it the 'Dragon's Head', so that, with greater reverence and the apparent authority of divine will, they might make an impression upon credulous ears.

Chapter Twelve

The origin of Antiscia. Their uselessness in prediction according to Ptolemy, and the errors of Maternus and Haly Avenrodan in this matter.

Certain mathematicians likewise err concerning antiscia.

Since the degrees in which the Sun is positioned make the days equal to the days and the nights equal to the nights, Hipparchus and the ancients, on account of the equality of days and nights, call these degrees antiscia, 'equal from the opposite.'

Our diviners argue these degrees are equal in power and influence – something no one, except through utter ignorance, fails to recognise. Therefore, from the equality that occurs in days and nights when the Sun traverses them, this implies an equality of influence.

To accuse astrologers of mathematical ignorance is a fault worthy of pardon. Ptolemy says that they assign the highest authority in their judgements to antiscia. Nor do I wonder, for though I have diligently examined the entire work of Maternus, nowhere does he indicate he has read Ptolemy.

As regards antiscia, Ptolemy never employs them in pronouncements, whether you consult his *Centiloquium* or his *Apotelesmata*. Only in the first book of the *Apotelesmata*, where he recounts the opinions of others (concerning the affinity and agreement of signs within astrological doctrine), does he use the following words:

"Again, they say that whatever is equally distant from either of the tropics is of equal power, because when the Sun is positioned in these degrees, it makes the days equal to the days and the nights equal to the nights."

But once he has said this, as though having then forgotten it – indeed, he did not approve of it – he never brings it up again. He never mentions it, neither the term antiscia (nowhere to be found in his works), nor even the concept itself, that is, the affinity and agreement of such regions equally distant from the tropics.

As for what is said in the *Centiloquium* – that a planet often extends its influence to a place where it is not – attempting to apply this to antiscia and dodecatemoria is excessively forced and overly free. Especially since throughout his work, Ptolemy disregards the antiscia.

Indeed, he intended to indicate nothing other than the power of configuration and radiation, through which, according to the opinion of astrologers, especially Ptolemy, planets act with great effect from locations where they are not physically present. In celestial

configurations, Ptolemy observes almost nothing else – or certainly, nothing more – than phases and schematic arrangements.

Neither did Maternus understand what antiscia meant. He promises to explain their hidden rationale, as if it were something unknown to any mathematician or something that could not be explained in three words. Yet his ignorance is revealed. He speaks too unskilfully, saying that Mars, in the fifth degree of Gemini, sends an antiscion into Cancer. He would not have said this if he truly understood the nature of an antiscion.

An antiscion is neither a ray nor a light. Nor is an antiscion 'sent' from any of the planets. Rather, what is meant is that the degree in which the planet is located possesses an equality. Therefore, experts would say the *epoch* of Mars, that is, the degree it occupies, is the antiscion of such-and-such a degree in Gemini. Or, equivalently, that Mars is in the antiscion of Gemini. But because Maternus says that Mars casts an antiscion into Gemini, he will be hissed at by mathematicians and mocked.

Haly Avenrodan also errs. In the first book of his *Commentaries*, when explaining certain aphorisms, he writes that degrees equally distant from the equinoxes, as well as those equally distant from the tropics – namely, Cancer and Capricorn – are of equal power.

This was not the opinion of the ancients regarding distance from the equinoxes, but only from the tropics, to which the name *antiscia* was assigned. Nor should Abenragel have held this view, since circles described on either side of the equinoxes are indeed equal. Necessarily, parallels equally distant are equal to one another, but the same is not true of semicircles, which *is* the case for degrees equally distant from the tropics – whence arises the agreement of the antiscia.

He also errs in counting the relationship of a degree to its antiscion among those configurations called *aspects*. From this, Abenragel concludes that a planet positioned in one

of these degrees exerts influence in the other, provided it is in a hexagonal, tetragonal, trigonal, or opposite location.

But this error arose because of what the Greeks call σχήματα – what the barbarians, and our own scholars, call *aspects*.

Among the Greeks, signs are said to 'see' each other not when they are configured with one another – that is, as our people say, when they 'aspect' – but rather when they rise and set from these points. Since this happens in signs that are separated equally from the tropics (for they lie on the same parallel), those signs which some astrologers call *antiscia*, the majority call 'seeing' signs. The Arabs, and afterward the Latins, adopted this term whereby they misuse the word *aspect*.

An error in language produces an error in things. This explains the varied interpretations of antiscia among astrologers, and how greatly the Arabs and Latins have strayed from the opinion of the ancients concerning these matters.

Chapter Thirteen

Astrologers are equally deceived regarding commanding and obedient signs.

Another observation concerns commanding and obedient signs. The signs in which the Sun makes the days longer than the nights, in which light surpasses darkness in equal proportion, mathematicians called προστάττοντα, that is, *commanding* signs. Those that, conversely, portend darkness over light are ὑπηρετοῦντα – *obedient* signs.

Natal astrologers then decreed that whoever had a commanding sign as Ascendant in their nativity would be destined to rule, while one whose nativity had an obedient sign would be destined to serve. As if the designation of commanding and obedient referred to this, rather than simply indicating the inequality of day and night occurring under those signs.

Chapter Fourteen

Refutation of the reasons astrologers assign for the exaltations of the planets.

Astrological opinion concerning the heights or exaltations of the planets – where it originated, and how astrologers were led headlong into error – was brought to my attention by Pliny, that most diligent writer of *Natural History*, to whom all antiquity and all posterity are indebted, for he rescued one discipline from barbarism and another from oblivion.

In his second book, while discussing why the same stars sometimes appear higher and at other times lower, after presenting certain arguments, he proceeds as follows:

"Another cause of elevation is that they have their highest apsides in these signs: Saturn in the twentieth degree of Libra, Jupiter in the fifteenth of Cancer, Mars in the twenty-eighth of Capricorn, the Sun in the nineteenth of Aries, Venus in the twenty-sixth of Pisces, Mercury in the fifteenth of Virgo, and the Moon in the fourth of Taurus."

Thus speaks Pliny.

From this, anyone of reasonable intellect may gather that in ancient times (or at least this was believed the case by those devoted to celestial science), the stars were considered to be at the highest point from the summit of their apsidal centres when positioned in the aforementioned degrees. Those degrees or parts were called the *heights* of the planets.

The natal astrologers preserved the name of 'height,' but nevertheless misused it – as if it referred not to a spatial altitude, but to a superiority in nature and power. For astrologers say planets are exalted only in those degrees where, according to ancient astronomy, they were thought to be farthest from their centres.

However, the reader should be aware that an error is found in the common manuscripts of Pliny, and that the subsequent words suffer from transposed numbers. The numeral marking that rightfully belongs to Venus was transferred to the Sun, so that in the

case of the Sun, the twenty-ninth degree is incorrectly read instead of the nineteenth, and in the case of Venus, the sixteenth is wrongly recorded instead of the twenty-sixth.

There is also an error in Maternus, where we read that Venus is exalted in the twenty-seventh degree of Pisces. It should instead be written as the twenty-sixth, according to Porphyry.

Another variation also exists: ancient astrology assigns the fourth degree of Taurus to the Moon, whereas a later age assigned the third – it is unclear whether this is a difference in opinion or due to the frequent errors of scribes, who often make mistakes in numerical notation. Similarly, for Saturn, it should not be read as the twenty-first degree but simply the twentieth, as confirmed by the same authority, Porphyry.

It is clear how the exaltations of the planets infiltrated divinatory astrology. But once this doctrine was passed down to later generations, and once the original reasoning behind the teaching had been rendered obsolete by changes in theoretical astronomy, posterity devised new explanations to persuade themselves that the ancient belief had been based on reason. As often happens with falsehoods, different people arrived at different explanations, all flimsy and laughable.

Ptolemy, for instance, states: “The Sun is exalted in Aries because, upon reaching this sign, its power begins to appear more strongly.”

The strength of a sign does not arise from its quality and nature (as we said above concerning houses), but rather from its position. It is not because the Sun traverses Aries that it begins to grow stronger, but because it begins to approach us. Merely because it brings warmth to one’s gardens when entering that sign, one should not expect that it will also elevate itself to a throne, as if placed in its exaltation. In fact, in other regions, it would be cast down. In Aries, it happens to be farther away from some places, while under Libra, it happens to be closer.

Let us examine the other planets. The Moon is exalted in Taurus, because if it is a New Moon in Aries, its power will first appear in Taurus. What an utterly compelling argument! As if the same would not happen with Gemini, should the Moon meet the Sun there; or in Cancer, should they conjoin in Gemini; or in Leo, if they meet in Cancer. And so on with all the other signs. One can only wonder at how Ptolemy was not ashamed to write such things.

There are other explanations as well: the Moon is the closest to the Sun, and its triangle is a lateral one. Yet Ptolemy does not consider the Moon to be closest to the Sun. Nor should we infer exaltation from a trigon, nor from a house. These concepts are unrelated. Each ought to retain its own proper authority in its own domain.

Furthermore, if the argument is based on the trigon, why should Mercury not be exalted in Gemini rather than in Virgo? This would align with the idea that Mercury, rarely far from the Sun, should be exalted near the Sun's exaltation. This principle of exaltations is something Albumasar also attempts to maintain.

Ptolemy says: "Virgo suits Mercury because it is dry, and under Virgo, the dryness of autumn becomes apparent."

The change of the four seasons does not arise from the nature of the signs. When the Sun is in Virgo, it produces in other regions the same effect that it does in Taurus for us.

Moreover, if this rule were followed, why should Mars not be considered the ruler of Cancer, under which the world burns with heat, just as under Virgo it begins to dry? Mars – a planet most full of heat – is exalted in Capricorn, under which we are bound by cold, frost, and ice. Astrologers argue Capricorn inclines towards the south, and the southern region is hotter. Such frivolity and inconsistency in reasoning (if this be called reasoning at all). For when discussing the same sign, authorities describe it now as hot, now as cold, and then, suddenly, neither hot nor cold, but rather humid or dry. In the division of the signs,

astrologers classify Capricorn as an earth sign, and therefore dry, but when they assign it to Mars, they count it among the fiery. When they say it is the domicile of Saturn, the coldest of stars, they claim that snow and rain occur under it.

If Capricorn, as a supposedly hot sign, is granted to Mars, then by the same reasoning, Cancer, being exceedingly cold, should not be ruled by Jupiter, said to be all-powerful through his life-giving heat.

But, of course, there is always some excuse ready at hand. Jupiter, says Ptolemy, stirs up true north winds, and therefore a sign placed to the north befits him.

Yet some astrologers deny that such winds are stirred by Jupiter at all. Furthermore, even Ptolemy himself cannot be excused, for by the same logic, he ought to have placed Mars in the west, not the south, since he believes Mars stirs up western winds, not southern ones.

I pass over the fact that Gemini and Leo incline towards the north. Why, then, should Leo not rather be the exaltation of Jupiter? The heat of Leo does not suit Jupiter, says Avenrodan, but rather the coldness of Cancer does.

Leo belongs to Jupiter's trigon, is a diurnal and masculine sign, while Jupiter himself is also masculine and diurnal. Cancer, on the other hand, is classified among the feminine, nocturnal, and watery signs, all contrary to the nature of Jupiter. Therefore, Leo is far more suitable for him than Cancer.

As for Venus and Saturn, astrologers are no less absurd in their claims: they say that Libra is Saturn's exaltation because Saturn is contrary to the Sun, and that Venus is exalted in Pisces because she is humid, and under Pisces the moisture of spring begins. But these qualities of the seasons do not result from the nature of the signs – rather from the position of the Sun as it approaches and recedes.

As for Saturn, astrologers speak about him as suits their convenience. In one place, they make him the opposite of the Sun, while elsewhere they declare him to be of the same

condition – that is, they claim he signifies the same sector as the Sun, and that he is oriental in either situation. Yet both Saturn and the Sun are masculine, and both are diurnal.

We would have far too much to say if we were to pursue in detail all such matters.

Some astrologers, lacking confidence in these explanations, devise a new rationale – one shorter, but entirely ineffective – namely, that exaltations of the planets correspond to the trigon or hexagon of their domiciles, except in the case of Mercury. If you ask why they prefer hexagons and trigons for the Moon, Venus, and Mars, but not for the others, they have no answer.

They respond that the trigon is more suitable for diurnal and more powerful planets, whereas the hexagon is more fitting for nocturnal planets – those belonging to the 'sect' of the Moon, which the Arabs call *aiz*, 'weakness of rays.' But they are mistaken regarding Mars, for he is not classified as nocturnal because he is weak, but rather so that the vigour and effectiveness of his rays may be restrained by the cold of the night. Nor can he be said to belong to the sect of the Moon, since he is a masculine planet and differs from the Moon in both qualities. By an entirely contrary reasoning, he is considered nocturnal: the Moon due to similarity of nature, Mars due to dissimilarity. Indeed, Mars is opposed to the Moon and to Cancer in Capricorn, just as he is opposed to Taurus in Scorpio.

But let this conjecture proceed. Let the astrologers answer this: why should it be the right-hand trigon? Or rather, why should Jupiter's exaltation be placed in the left-hand trigon, while for Saturn and the Sun it is placed in the right-hand trigon? And since the planets have two domiciles, why should the trigon be taken from one rather than the other?

Since Jupiter has his domiciles in Sagittarius and Pisces, why should his exaltation be placed in Cancer rather than in Leo? This is especially questionable when, as the astrologers themselves say, Jupiter has more affinity with Sagittarius, and, as we have argued, Leo is far more suitable to him than Cancer.

Finally, so that you may understand all such conjectures were fabricated by later generations and were by no means the foundation upon which the original founders of this doctrine laid their principles, consider this. Astrologers do not provide a reason why a planet is exalted in a particular sign rather than another, nor even why it is exalted in a specific degree within that sign. We have previously demonstrated the cause of this according to ancient astrology.

Albumasar claims it is difficult for the entire community of astrologers to determine exaltations, and, lest he say nothing at all, he anxiously twists numerous arguments on this matter with an excessively perverse and fanciful subtlety. Therefore, it is unquestionably evident that, due to the premise of the old discipline – which believed planets are most distant from their centres at certain degrees – this doctrine of planetary exaltations was accepted by natal astrology.

No one can fail to understand how meaningless this renders exaltations. Not only because astrologers transferred to the nature and power of the planets what was merely a designation of position and place, but also because ancient astronomy itself was likely mistaken in this regard, being highly deceptive and poorly investigated in its beginnings. Even if conclusions had been true at the time, they no longer align with the reasoning of later generations, since the apsides and the apogees of the wandering stars have shifted.

Chapter Fifteen

The arguments of astrologers concerning trigons, and the gender of the signs, are refuted.

We should not think astrologers are merely raving after seizing upon an opportunity, as if they are too sharp-eyed to go astray without a guide. Indeed, they often transgress where

there is no transgressor. With these exaltations, they owe nearly all their madness to the mathematicians – though more to themselves, lest we wrong mathematicians. And they commonly call trigons ‘triplicities’, a concept they themselves invented.

This matter depends on the fact that some signs are fiery, some earthy, some airy, and some watery. We will first compel astrologers to give an account of these things. Then we will examine how they define the relationship of signs and trigons.

Tell us, then, most wise men and interpreters of the heavens, by what reasoning have you assigned elemental qualities to the signs in the sky? Avenrodan, great in your discipline, attributes the nature of the signs either to the Sun or to the stars. To the Sun, in that the nature of a given sign results from the Sun passing through that sign. The movable signs are thus called equinoctial or solstitial, while the others are called fixed or common. But if the virtues of the stars inhabiting those signs are so assigned, I see that neither ‘Sun’ nor ‘stars’ aligns with your division.

If we follow the workings of the Sun, Cancer will be fiery, not watery; likewise, Sagittarius will be more watery than fiery; Aries will not be fiery but airy; Taurus will abound more in moisture and warmth than in cold and dryness; and nearly all the conditions of the signs will be changed. If we refer the matter to the stars, these are likewise constantly migrating from their own positions.

Or is the reasoning of Al-Kindi preferable? He considered that there are four principal signs in the Zodiac, two equinoctial and two solstitial, and assigned to these four the primary qualities of the four elements: fiery to Aries, watery to Cancer, airy to Libra, and earthy to Capricorn. Because the radiation of trigons falls upon places that correspond to each other, the signs triangular to any given sign, on both sides, are therefore deemed to have acquired a similar nature.

But this reasoning does not hold, since in assigning the four properties of the elements to the signs, this classification could be determined in two ways. One based on the kinship between sign and element, the other based on the arrangement of the elements themselves, so that the first would be assigned to the first, the second to the second, and so on.

If astrologers observed the first principle, that warm corresponds to warm and cold to cold, they ought to have assigned fire to Cancer and air to Aries. But if they followed the second principle, so that air, as the second element after fire, would be given to Cancer, then, as Al-Kindi says, opposites should be assigned: warmth to cold, and cold to warmth. Thus, to the sign of the second season, that is, to Cancer, cold should be assigned, and consequently to Libra, opposite Aries. But if they declare that water should be placed before air because it is more efficacious, they would make themselves wiser by nature itself.

Furthermore, if the active quality assigned to Cancer is cold rather than moisture, how is it that they designate it among the feminine and nocturnal signs? Should it not rather be among the diurnal and masculine? This they observe in the planets as well, recognizing sex in the heavens more rationally according to active and passive qualities: hence, they have called Jupiter, the Sun, and Mars, where heat predominates, male, and Saturn, where cold excels, male as well, whilst designating the Moon and Venus as female because they are moist.

Even among the Egyptians, fire and water were considered masculine for the reason stated, while air and water were considered feminine. Accordingly, the astrologers ought to assign the watery signs to the masculine category rather than the feminine. Yet they have done the opposite in every case, deciding that Cancer, Pisces, and Scorpio are feminine, whereas they have declared the airy signs masculine. However, since moisture is the proper quality of air, astrology contradicts itself in these matters and undermines itself, raving, as it does, at every turn.

But not to stray too far from the subject, what is the purpose of these trifling absurdities? To distinguish sex in the heavens, whereby astrologers establish six masculine signs and six feminine signs, making the first masculine, the next feminine, and so on, alternating always between a man and a woman.

If this were to be done, it ought to have been done according to the nature of the signs, not based on some fatalistic and meaningless consequence, that of the first and second, and so on. But listen to the reasoning, according to Ptolemy: "Night," he says, "follows day, and women cling to men; therefore, a feminine sign ought to be placed next to a masculine one."

One should not argue but rather laugh, unless, perhaps, it is a serious matter for us to first examine whether night follows day or day follows night. Perhaps the nocturnal signs ought to have been placed first, since it is more fitting that day follows night rather than night follows day. For it is written: "And there was evening and there was morning, one day."

The Hebrews established the beginnings of time from night. But we are too preoccupied to indulge in trifling nonsense with many words. However, even in Ptolemy, this distinction of sexes holds significant weight, as it is of no small importance to him whether the planets are found in masculine or feminine signs.

If astrologers claim their doctrine is confirmed by experience, I ask: by whose experiences – their own, or those of the ancients? If by their own, they lack grey hairs to have such authority. If by the ancients, a great part of the ancients thought otherwise.

Many determined the order from the Ascendant, so the rising sign would always be masculine and diurnal, while the rest would be divided in alternating order. Others made four signs diurnal: Aries, Cancer, Leo, and Sagittarius; four nocturnal: Gemini, Libra, Capricorn, and Aquarius; and four mixed: Taurus, Virgo, Pisces, and Scorpio.

Indeed, antiquity rejected the presently accepted opinion. Hence that statement from ancient astrology:

There are those to whom it is pleasing that the diurnal ones are those masculine ones that rise,

That the feminine ones rejoice in the broad shadows of the night,

Who speak many things to themselves with no one showing them.

In this passage, a commonplace poetic interpreter raves to an astonishing degree. Far more rational (if one sometimes raves rationally) were those who called fiery and watery signs diurnal, with the remaining six nocturnal, namely the earthy and airy signs. Likewise, if what pleases Ptolemy is that the masculine and the diurnal follow each other, those masculine ones are feminine. Thus the poet sings:

For the sign of Sagittarius and of swift Leo

And Aries looking back at its flanks with a golden fleece,

Then Pisces, Cancer, and Scorpio with Cancer's sting

Either differing in location but adjacent, or with equal divisions,

All are said to be diurnal under a similar condition,

The rest, neither joined in number nor by the order of their place,

Scattered in locations, are considered equally nocturnal.

There were also those who thought differently:

Moreover, they said that six consecutive signs were diurnal

Belonging to the cycles of Castor, which are from the first sign

Of the Ram, while six from Libra were seen as nocturnal.

Let astrologers appeal to the observations of the ancients, from whom they often differ, just as all astrology differs from the truth.

The argument may also be refuted: if a masculine sign must be placed in the first position, it remains uncertain which sign is both first and masculine, just as it is uncertain which sign is the initial one, as we have shown above.

Some consider Cancer the first, others Capricorn, yet both of these are deemed feminine. Perhaps it was not necessary to refute these fables, although it was worthwhile to refute this fable in passing – the division of celestial signs by sex. We have thus digressed in order to show astrologers contradict themselves with Cancer, which they make both aqueous and feminine, although frigidity belongs among active qualities, not passive ones.

But if their primary division is granted, in which signs are divided into tropical and equinoctial, their method of distribution will not hold in the other signs. For they attempt to demonstrate using circular logic, a fallacy in dialectics. When they prove that trigonal signs share the same nature, they assume a radiation occurs between locations that agree with each other. Then, when they wish to prove that trigonal radiation agrees, they assume that it falls upon locations of the same nature.

Let Al-Kindi, then, be silent.

The remaining opinion is that of Abraham Ibn Ezra, who derives the reasoning for these qualities from the figures of the images, and the properties of the animals depicted therein. Pisces, Cancer, and Scorpio are called cold because they bear the names and forms of aquatic creatures; the sign of Leo is hot due to the nature of the lion, and so on with the rest.

This reasoning is either non-existent (if there are no images), or false (if there are any images), since it confuses images with signs.

Since the figures change in place, this distinction of signs will be temporary – not fixed and perpetual, as all astrologers wish, including Ibn Ezra himself. Aries will not be a fiery sign in our time, since almost the entire image of Pisces has now occupied up to the twenty-fifth degree of it, with the image of Aries already displaced.

If there are no trigons, there are also no *trigonocrators*, the so-called rulers of the triplicities. Even if these are conceded, astrologers still define them, as usual, irrationally.

If a certain sign is beneficial for a given planet, then the sign that opposes it by diameter will be harmful to it, as is evident in the planetary domiciles and in their exaltations.

But if this is the case, how is it that, having forgotten their own doctrine, astrologers wish to have the same three planets rule over opposite trigons? Mars, Venus, and the Moon rule in both the earthy and watery trigons. Taurus is opposed to Scorpio, Virgo is opposed to Pisces, Capricorn is positioned opposite Cancer. Yet in Taurus, Virgo, and Capricorn, those who hold dominion are the same ones who, in Cancer, Pisces, and Scorpio, reign with full trigon authority.

If you ask astrologers why Mars is in its fall in Cancer, they will answer nothing other than that it is exalted in Capricorn. If you ask why it is afflicted in Taurus, they will say it is because its domicile is in Scorpio. All these ideas contradict one another and mutually refute themselves with their own falsehood.

Furthermore, in the first triangularity, Albumasar, Alchabitius, and all the Latins, declare that Saturn rules together with Jupiter and the Sun. Yet Saturn is in exile there, is in its fall in Leo, and recognises nothing of its own in Aries or Sagittarius. They claim, however, that Saturn is diurnal, just like Jupiter and the Sun. But then, he is also cold, whereas both of the others are considered hot.

If, when discussing exaltations, they assign Libra to Saturn merely because it opposes the nature of the Sun, why then does Saturn rule in Aries? Why is Saturn, as the lord of the triplicity, associated with the Sun in contradiction to the nature of those signs, as if it were most harmonious with the Sun's nature?

There are many such contradictions, but to pursue each in detail would be, perhaps, superfluous – certainly wearisome and nauseating to me. And if they wish here to appeal to

the authority of empirical experience, I, in turn, appeal to the discord among such experiences, since the Egyptians recognise only two *trigonocrators*, as can be understood from the *monomoiria.* Others establish three, and then contradict each other.

In the first trigon, Albumasar, Alchabitius, and the Latins wish Saturn to rule, whereas Ptolemy assigns it to Mars. Conversely, in the second trigon, Ptolemy assigns Saturn, while the Arabs and nearly all the Latins assign Mars. In the fourth trigon, Ptolemy again makes Mars the ruler, with two subordinate or secondary rulers: the Moon by night, Venus by day.

Others equate Mars with Venus in rulership, Mars ruling only at night and Venus during the day. The Moon holds a secondary authority, both by night and day. More recent astrologers claim Arab opinion is confirmed by Latin experiments, and Avenrodan himself (not to mention the Greeks) asserts all effects support Ptolemy's opinion.

I omit many other disputes in which they clash over these same trigons, since the matter has already been discussed above. But even great conjunctions are dissolved insofar as they depend on the migration of the trigon, not to mention other astrological doctrines that take their credibility and foundation chiefly from these very trigons.

Chapter Sixteen

Concerning the faces, bounds, and dodecatemoria of the Babylonians, the novenarii, and the monomoiria. How little consistency there is, even according to the testimony of Ptolemy himself.

What remains is to refute the faces and bounds, so that everything may be discussed concerning the affinity of planets with the signs. We have already overturned the houses, cast down the exaltations, obliterated the trigons. There is no trouble in refuting these as well, for

there are no faces, not even according to Ptolemy. This is also true among the Greeks, who speak of *decans*. The *decans* pertain to the signs, whereas the faces belong to the planets.

These faces Ptolemy rejects, considering them unworthy of mention and of no use in prognostications. Since astrologers cannot establish their existence by rational means, they might perhaps claim the evidence of experience – were it not for the discord among astrologers. For the Indians assign different faces than the Babylonians (whom the Arabs follow), and different ones still does Maternus attribute to the planets.

For instance, the first decan of Taurus, according to the Babylonians, belongs to Mercury, to Venus according to the Indians, to Jupiter according to Maternus. The second belongs to the Moon for some, to Mercury for others, to Mars for yet others. The first decan of Gemini, according to the Chaldeans, belongs to Jupiter; to Mercury, according to the Indians; to Mars, according to Maternus.

To avoid enumerating all, the Babylonians followed this method: they assigned the first decan, that of Aries, to Mars, since that is the house of Mars. Yet in accordance with the order of the spheres, they gave the subsequent *decans* of each sign to the planets that follow, distributing the remaining two among the rulers of that sign's trigon. Maternus' scheme is entirely arbitrary, relying solely on ancient tradition.

These doctrines were not established by true observation or the credibility of experiment, but by weak and flimsy conjectures, granting to experience a trust it does not deserve. We shall later discuss these matters in detail, as well as the experiments themselves.

Just as the Egyptians devised the *decans* by dividing a sign into three parts, so too did the Babylonians divide a sign into twelve parts, calling this *dodecatemoria*. However, they used this *dodecatemoria* not in the way that Maternus attributes to them. The authorities for this system are Manilius and Porphyry. Ptolemy also mentions it, though mockingly, stating that these *dodecatemoria* are called 'places.'

Albumasar, Ibn Ezra, and Hispalensis [John of Seville] likewise mention only this form of *dodecathemoria*, not that transmitted by Maternus, Alchabitius, and Heliodorus, which we shall discuss later. John of Saxony, in his commentaries on Alchabitius, was misled by the similarity of names and confused the two.

The Indians invented their own system, dividing each sign into nine parts. The first part belongs to the ruler of the sign, which is the mobile (cardinal) sign of its trigon. Thus, the first ninth of Aries belongs to Mars, since Aries is a mobile sign. Likewise, the first ninth of Leo is also assigned to Mars, because Aries, as a sign of the fiery trigon, is mobile.

They assign the following parts to the rulers of the succeeding signs. So, if the first belongs to Mars (since Aries is its house), the second is assigned to Venus, the third to Mercury, because Venus rules Taurus and Mercury rules Gemini.

The Egyptians, in turn, assigned a single number to each individual part, which they called *monomiria*, and they distributed these among the planets in the order of the trigons. The first part of any given sign was the *monomiria* of the planet that ruled its trigon – the nocturnal ruler if the nativity was nocturnal, the diurnal ruler if it was diurnal. The second part belonged to the secondary ruler of the same trigon, the third to the ruler of the trigon of the following sign, and so on, with the stipulation that the same planet would not receive *monomiria* twice in a single cycle.

All these divisions and fragmentations I shall refute using no lesser source than Ptolemy himself, who states that they have no physical rationale whatsoever, but are mere empty display. Nor could he have defined it more accurately, for the more reckless and arbitrary these inventions are, the more wondrous and grand they appear to the ignorant and unskilled.

There is no other reason Albumasar is held in high regard in astrology, given his ignorance of mathematics, than this: nothing seems irrational to him. He amasses all fables

together, rejecting nothing and scorning nothing. He appears to have revealed more secrets than others, since he simply recounts more fables.

What remains is to refute the *fines* (bounds), which I shall briefly disprove by pointing out the discord among those who still dispute them. Ptolemy prescribes one set, the Egyptians another, the Babylonians yet another, the Indians another, and some unknown astrologer (whom Albumasar mentions) provides yet another, from whose opinion wonders are promised in the *Great Introduction*. The younger astrologers adhere to the Egyptians; the Greeks follow Ptolemy, along with Avenrodan. Others have their own followers.

Therefore, not only are the signs themselves meaningless, but planetary affinities with the signs – *domus* (house), *regnum* (kingdom), and *finis* (bound) – are frivolous, fictitious, contradictory, and imaginary. Nor do the Latins alone disagree about this, since even in comparing writers with one another, there is inconsistency.

Commonly, astrologers assign the first rank to the *domus*, the second to *exaltation*, the third to the *fines*, the fourth to *triplicity*, and the fifth to *face*. Ptolemy, however, places the *domus* first, *triplicity* second (as Haly Avenrodan affirms), *exaltation* third, and *terminus* fourth, while he omits *face* entirely.

The Chaldeans do not acknowledge *domus* at all. The Egyptians add *monomiria* to everything; the Indians use *novenarii*. The Babylonians use *dodecatemoria*, and they do not combine *triplicity* with *fines*. Maternus assigns greater importance to *altitude* than to *fines*, and more to *fines* than to *domus*. He claims that the stars rejoice first in their exalted position, second in their own *fines*, and third in their own *domus*.

Thus, the doctrines of astrologers are utterly vain, as they neither rely on reason or experience. Astrologers babble nonsense in one matter, yet pretend to agree in another.

Chapter Seventeen

Concerning feminine, bright, and dark degrees, and others of this kind, which Ptolemy despised. Nor do other astrologers agree on them.

We have refuted those divisions of the signs which astrologers relate to the planets. Mars is exalted, elsewhere the Sun. This is the face of one, that of another. This is the *monomiria* of one, that of another. Likewise, triplicities, bounds, and *dodecatemoria*. Now we must address the degrees themselves, as some are said to be bright, others dark, others fortunate, others '*Puteales*,' others unhealthy, which they call '*Alzemena*,' some masculine, others feminine.

This has been largely satisfied above; now we add this: Ptolemy despised all these things. His interpreter Avenrodan concedes only this much – that they may be observed by experiments. But what trust is there in experiment? There are six opinions concerning masculine and feminine degrees. For they are described differently in the laws of Julius Firmicus Maternus, differently in Albumasar, differently in Avenrodan, differently in Alchabitius; Abraham varies in many respects. Those who completely disagree make the twelfth part of each sign sometimes masculine, sometimes feminine alternately, establishing the first parts according to the nature of the sign. I pass over those who place twelve out of thirty degrees in one gender of the sign, the following twelve in the opposite, then divide the remaining six equally in proportion.

Regarding bright and dark and obscure degrees, another opinion first appeared among the ancients based on the position of the stars. They called that part bright in which there was a star, and they believed this to be perpetual, because they thought the stars did not move. They were, of course, mistaken.

If we assent to Hipparchus, Ptolemy, and the rest, later generations (not having understood the origin of the doctrine, although they claim the stars move) assign the same

degrees as bright and the same as dark as the ancients determined. How great the confusion, and how great the distortion of matters and words. Nothing could be less true than their experience regarding these things.

The same error was made concerning the degrees they claim increase fortune. You will find these noted in a different manner in Alchabitius, differently in Albumasar, and differently in Ibn Ezra.

The same diversity exists in the so-called '*Puteal*' degrees, which none of the ancients used. Albumasar lies when he claims to follow the opinion of the Egyptians while describing them. For many of the degrees Albumasar designates as '*Puteal*,' Hephaestion of Thebes, an expert in all Egyptian astrology, lists among the bright degrees. The sixth degree of Aries, the fifth of Taurus, the thirtieth of Gemini, the twenty-second of Cancer, and many others in different signs.

Furthermore, a certain astrologer from Doris, who called himself an investigator of these degree properties, held an entirely different view from all the ancients. He offers no proof for his doctrine other than the claim that experience supports his view. Supposedly, empirical outcomes do not align with the statements of the ancients but rather with his own.

Therefore, this observation of different degrees is vain, unreliable, and inconsistent. Not only is it condemned by us, but also by Ptolemy.

Chapter Eighteen

The parts (or lots), and whence they have arisen. How much astrologers contradict each other in measuring them.

The parts (or lots) astrologers use in every prediction… is it not mere fiction, a vain thing, a doctrine of the will? They say: "Count the numbers, the degrees intercepted between

this planet and that, and when you have counted as many degrees from the Ascendant, where the number ends, there will be a part signifying something, to be observed no differently than the planets or stars."

What can be more insane? There is no natural force in the heavens where there is no star, where there is neither light nor any natural quality, just as there is none in that degree at which the number terminates.

But because this enumeration is devised at a whim and has no physical rationale, the ever-nonsensical Albumasar wished to give a reason for such parts, which none of the ancients had done. He says something so that, with greatest verbosity, he says nothing at all.

The sum of his words is this: when two planets signify the same thing, the distance between them also has the power of signification, but it must be measured from the Ascendant. This is because future good or bad events are discerned from it.

For example, since the Sun and Saturn are stars of parents, the interval separating them must be counted from the Ascendant. In the degree where that number ends, one finds future signification concerning parents, because the power of the Sun and Saturn is joined in that place.

Behold the subtlety of Albumasar. He assumes the incorrect and ridiculous: that such distances have power, whereby an interval drawn from the Ascendant has effect. He ought to have explained this with genuine reason, but since he does not do so, we find no reasoned opinion but merely a statement.

This is ineffective. It proves nothing about what it seeks. It is also false, contradicting the very principles of astrologers, since the authors of the parts assign the primary parts to the planets themselves, not to things and events. But this was devised by later generations.

How does the reasoning of Albumasar hold, when he says the parts are taken from the interval between two planets signifying the same thing? Especially since, apart from the Sun

and the Moon, the distance of no planet is taken into account according to Hermes, who was the first author of these parts.

Rather, the interval is taken from the planet whose part is sought and from the part of one of the luminaries. The Venusian part is taken from the part of the Sun and Venus, where we previously noted Albumasar and Alchabitius were deceived. The part of Mercury is taken from the part of the Moon, which is called the Part of Fortune, and from Mercury itself, where these writers also erred. The part of Mars is taken from Mars and the Part of Fortune; the part of Jupiter from the part of the Sun and Jupiter; the parts of the Sun and Moon from each other, as is manifest to all.

Nor do the parts signify anything other than what each planet, to which the part is said to belong, signifies. Among astrologers, the parts of things are not taken from the planets signifying those things. Mars signifies brothers among all astrologers, yet the part of brothers is taken from Jupiter and Saturn, never from Mars. The ancients derived the part of marriage from Saturn, although they did not attribute any connection between that planet and marriage.

Albumasar's invention is not only trivial and nonsensical, but also contrary to the opinion of the original authors of this doctrine. The concept was conceived by someone entirely different from this chatterer, who, after so many centuries, dreamt his own ideas.

The first occasion of this error was as follows: some of the ancients believed the ascending degree corresponded to the Sun. Since the Moon was considered to be almost above the Sun, they wished there to be another, corresponding to the Moon in proportion. They judged that it should be placed at a distance from the Ascendant equal to the distance of Sun from the Moon in any given nativity. They called this place the Part of Fortune, for a reason we will mention shortly.

Ptolemy himself teaches this in the third book of the *Apotelesmata*, reminding us that all antiquity agreed the Part of Fortune should be as distant from the Ascendant as the Moon

is from the Sun. Nor does the opinion vary among those who, in nocturnal nativities, compute from the Moon to the Sun instead. These same individuals turn from the Ascendant towards the preceding signs, and thus they determine the location in the same way as those who, calculating from the Sun to the Moon, count according to the order of the signs.

I suspect the origin of the name 'Part of Fortune' to be as follows. Astrologers established two quasi-horoscopes, one for the Sun and one for the Moon. They attributed to the former, that is, to the true and solar horoscope, the fortune of body and soul. To the latter, the lunar and adventitious horoscope, they attributed the fortune of external matters – those things outside of us.

Thus, from the first, our own fate was determined; from the second, the fate of what belongs to us. The lunar horoscope was named *Fors Fortunae* (Destiny of Fortune), and so Ptolemy judges fortune. Commonly, parts are called *fortes* (powers), while the places are mentioned by Maternus.

When this doctrine had already been developed, a certain Egyptian named Hermes, paying little attention to the reasoning of the previous system, thought the *fortes* (powers) of all the planets could be established by analogy. Thus, he constituted the *fortes* of Saturn and the other planets. He called the part of the Sun the Good God or the Good Demon; the part of Jupiter Victory; the part of Mercury Necessity; the part of Venus Love; the part of Mars Boldness; the part of Saturn Nemesis.

In arranging these, he observed the following method: he took each part from the distance of the respective planet to the part of either the Sun or the Moon (that of the Sun with Venus and Jupiter, and that of the Moon with the rest). Wherever the part of the Sun was used, the computation was made from it in a diurnal nativity. In a nocturnal nativity, from the planet to the part. The opposite was to be done where the Part of Fortune was used.

But Hermes also commanded that the number should be derived from the Ascendant, because this had been done by the ancients with the Part of Fortune, and by that example, he devised the others. He paid little attention to the fact that the reasoning (whatever its nature) by which the ancients established the *forte* of the Moon does not apply to the other planets. The other planets lack the same parity or kinship with the Sun that would require them to correspond in some way to the Ascendant, just as the Ascendant corresponds to the Sun.

Would that this licence of invention had been confined within these limits!

Paul of Alexandria, several centuries younger than Hermes, added to the planetary parts four additional parts, not of stars, but of things: parents, children, siblings, and marriage. This invention provided further occasion for madness. Fabricating an innumerable multitude of parts, astrologers designated a portion of the heavens for every worthless trifle.

Arab and Latin authors of the law concoct parts of chickpeas, beans, lentils, barley, onions, and countless such things, though no Chaldeans are known to have used parts. I believe this is not because it was an invention of the Egyptians, but rather because Porphyry, when writing his Apotelesmatic Institutions according to the Chaldean view, never once mentioned parts. Ptolemy abominates all parts except for the Part of Fortune. He would have been more correct to despise even that, since the horoscope of the Moon and whatever else contrived within it is vain and arbitrary.

Yet this error seems excusable when one considers what astrologers, with their futile recklessness, have built upon the example of a single part. They observe the distances of two planets and measure them from the Ascendant, because they found it done so in the Part of Fortune. The ancients did so because they were seeking something like a horoscope, and therefore placed it at a distance from the Ascendant equal to that by which the Sun moved from the Moon. Ignorant of the origin of this doctrine, later astrologers invented their own fables, as Albumasar recounts.

If these writers claim they are moved by experience rather than reason, I will reply, as always, that no authority can be given to experiences upon which men of equal authority do not agree. This has occurred in the case of parts, as in all doctrines of the astrologers.

The very Part of Fortune itself has almost always been placed in different locations by different people. Ptolemy, whether the nativity is diurnal or nocturnal, commands it to be computed from the Sun to the Moon. Others affirm that in a nocturnal nativity, it must be computed from the Moon to the Sun.

The Part of Venus, according to Heliodorus and Maternus, is taken from the Part of the Daemon to Venus during the day, and at night, the reverse. Alchabitius, following Albumasar, takes it from the Part of Fortune to the Part of the Daemon at night, and during the day, from the Daemon to Fortune. Haly Abenragel, however, takes it from Venus to Fortune equally, both by day and by night.

The Arabs take the Part of Parents in a diurnal nativity from the Sun to Saturn, and in a nocturnal nativity, from Saturn to the Sun. Heliodorus, however, if Saturn is hidden by rays, proceeds from Mars to Jupiter, regardless of whether it is day or night.

For the Part of Siblings, Maternus takes it at night from Jupiter to Saturn, while the Greeks take it at night but during the day from Saturn to Jupiter.

On the matter of marriage, they disagree in a remarkable way. If one seeks the Part of the Husband, Alchabitius always calculates it from the Sun to Venus, while Heliodorus takes it to Venus as well, but from Saturn. Maternus, following the opinion of the ancients, commands that during the day we proceed from Saturn to Venus, but at night we begin from Venus. But he himself testifies that he has tested what others prescribe, and that in both diurnal and nocturnal nativities, it should always be computed from the Sun to the Moon.

If we examine the nativity of a woman, Maternus commands that during the day, it should be computed from Mars to Venus, and at night from Venus to Mars. Others always

compute from Venus to Saturn, which Haly Abenragel and Alchabitius say is the opinion of Hermes. Abenragel says it should always be taken from the Moon to Mars, while others always compute from the Sun to Mars.

Astrologers disagree in other matters as well, but it is tedious to cite everything.

The Part of Travel, according to the Arabs, is taken from the ruler of the ninth house to the first minute of that house. The Greeks take it from the Sun to Mars.

The Part of Inheritances, according to some, is taken from Saturn to the Moon. Others take it from Saturn to Venus.

The Part of Servants, according to some, is taken from Mercury to the Moon. Others take it from Mars to the Moon.

All the ancients compute the Part of the Mother from Saturn to the Moon, then counting the number from the Ascendant, as the ancients were accustomed to do. The Arabs seek it from the Moon to the first minute of the eighth house, and they further add as many degrees as Saturn has travelled from the sign in which it is located. Whatever total the calculation produces, they count that much from the beginning of the sign in which Saturn is located, then through the following signs.

But we are not so idle as to recount all their fables. It is clear these do not rely on firm observations, but rather that each invented doctrines according to his own whim.

Chapter Nineteen

The doctrine of the dodecatemoria is rejected. Its Egyptian authors, along with their climacteric years, are also dismissed.

The madness of the *dodecatemoria*, and likewise that of the parts, is to be ridiculed. I do not mean that *dodecatemorion* we previously mentioned, the twelfth part of any sign, but rather that handed down by Maternus and Greek writers in the following manner:

They say, whenever you wish to seek the *dodecatemorion* of a star, compute its part twelve times. Whether that part of the sign where planet is located is the tenth or the fifth, or any other number, take the total of this computation and divide it, distributing it into thirty for each sign. You must begin from the beginning of the sign in which the star, whose *dodecatemorion* you seek, is located. In whichever sign the final number lands, that will show you the part of the *dodecatemorion*.

Suppose the Sun is in the fifth part of Aries, in five minutes. If you multiply five by twelve, you will have sixty parts, and the minutes will make one part, so the total will be sixty-one parts. You assign thirty to Aries, where the Sun is, another thirty to Taurus. Thus the *dodecatemorion* will be found in the first part of Gemini.

What could be more vain or more futile? Through these numbers, no power of the planet, no quality, is transferred.

If it is said that observation shows a correspondence to events? I will object with Paul of Alexandria, a most esteemed author among the Egyptians, to whom this invention especially belongs. He attests that such an observation was false because he himself introduced a new method, against the opinion of all the ancients – namely, that those parts should not be multiplied twelve times but rather thirteen times. Clearly, the ancient computation did not succeed, being false and fabricated.

Since occasionally, by multiplying thirteen times, the result happened to match what was sought, Paul followed the typical path of astrologers, and established a doctrine from a single success. Such are the absurdities of the Egyptians, whose opinions the superstitious

crowd worships as oracles – a doctrine not only lacking any touch of the divine but laughable even to wool-spinning women.

If there were any truth to astrology, the Egyptians would be the least deserving of the name of astrologers, for they were ignorant of the true and natural things sought in the heavens – the motions of the stars and planets. In prediction, they relied more on deceptive dreams than on the stars and planets.

Heliodorus writes that Hermes Trismegistus, first to discover the planetary parts, opened the door, so that through parts alone, with no other considerations, one could pronounce judgements on all matters, whether *monomoiria* or *dodecatemori*a. It is astonishing how much importance they placed on such things in all their predictions.

Ptolemy, wisest of astrologers, subtly criticises the Egyptians when he says he will present his doctrines *which are entire*. That is, not based on ineffective parts and numbers that lack causal reasoning. Many superfluously fabricate such things without any basis.

By 'numbers,' Ptolemy refers to the *dodecatemoria*, and to those who construct climacteric years based solely on numerical observation – such as the enneadic and hebdomatic years. Many elderly people are troubled by the superstition surrounding the sixty-third year, fearing it more than a panther or a tiger. But while the common people err in this matter out of excusable ignorance, who will excuse those who wish to be considered philosophers?

Here ends the sixth book of Giovanni Pico della Mirandola's Disputations Against Divinatory Astrology.

Disputations Against Divinatory Astrology

By Giovanni Pico della Mirandola, Count of Concordia

Book Seven

Chapter One

What has been discussed thus far, and what is to be discussed in this book.

Astrology is of no value. The stars do not operate as efficient causes, a conclusion which can be rationally derived from philosophy, the dignity of the stars, the condition of the inferior things, and the experience of faith. Consequently, no knowledge of future things is possible through the stars. Now it remains for us to argue: if the heavens influence earthly things as claimed by our opponents, in the manner claimed – that is, that all things draw their fate from the primordial hour – the fate of each thing still cannot be known by astrologers. Astrologers must establish what the fatal hour is for each, which they cannot know with certainty. Indeed, we shall prove in this present book that the hour cannot be known.

Since various principles of things are posited, we will first discuss the principle of man, and declare it in doubt. Certainly, it is not what is thought by astrologers.

Chapter Two

The fatal hour is ambiguous, especially in matters not completed in a moment but over time, and most of all in humans, in whom a nativity seems to have little strength.

There is, in determining the beginning of anything not completed in a moment but over time, an inextricable question: whether that time is fated in which the craftsman first

begins to make it, whatever efficient cause he may attain. Or rather when it is completed, or when it is not entirely brought forth at once, but in parts, whether different parts also have a different fate. For whatever we may say, each view has its own reasoning.

If the craftsman happily sets his hand to the work, how can the work be unfortunate when the craftsman works it happily? Both the happiness of the worker and the work itself arise only if the work turns out well and according to the desire of the worker. If fate is an efficient cause and not merely a sign from the stars, when should fate be acknowledged, rather than the stars?

On the other hand, how can a thing accept fate before the craftsman first begins to make it? How can it be called fated when it first begins to be made, as if it were already made at some point? A thing is what it is from its form, which arrives at the end and constitutes it. Why should that moment be fated, rather than the moment when it first begins to be what it is? When, separate from the cause that made it, it can stand on its own nature and firmness? Therefore, we should reasonably consider the fate of things not from the hour in which they are being made, but from the hour in which they begin to be.

Again, if different parts are completed at different times, why should not each part obtain its own fate from its own time? Experience proves that different parts of the same thing may turn out differently. Even in the body of the same man, some limbs will be well, others ill; and some part of the same city subject to ruin and fire, while nothing of the sort happens to the remainder.

Why, then, should it not be more reasonable that each thing is moved and governed by its own constellation, rather than drawing the fate of subsequent things from some past principle, which may perhaps be long gone?

These things have been said generally about all things. Now let us examine the same issue with regard to man, whose fated beginning (if indeed there is such a thing) necessarily gives rise to much inextricable ambiguity.

What, then, shall we determine, when there are so many beginnings of a man, and all seem worthy of being considered the principal one? Shall we deem that fatal moment of time the instant when the man first lies with the woman in intercourse? Or when the male seed is received into the womb? Or are these merely preludes and necessary antecedents? Shall we instead consider the true beginning of human formation when the seminal force approaches the purest part of the woman's excretion and compels it into a foetus, just as milk is united and coagulated into curd?

Or is this not yet the beginning of a man, but rather when, in conception, all the parts of the body are present in potentiality? Or when it is already surrounded by the membranes, what is called the secundines? Or is the origin of man when the heart is first distinctly separated in act, by whose generated power, like a son emancipated from his father, it begins to govern itself (as Aristotle, the interpreter of nature, teaches)? Great power and authority are attributed to this beginning, since the heart is the first thing to be formed and, in distinguishing the other parts, all movement and growth are distributed from the heart.

Let us indulge the fables of the astrologers. Just as the power implanted in the heart unfolds the entire man through the cooperation of the other parts, so too, the solar force first drawn into the heart unfolds the power of fate. Is the fate of the heart and life indeed the principal, but are the disposition of individual limbs subject primarily to the hour in which they are formed, each falling under its own distinct condition?

For those who consider all things correctly and weigh them carefully, it is clear and reasonable that, if, for example, the luminaries (as they are called) preside over the eyes, the condition and quality of the eyes should depend on the disposition of the luminaries at the

time when the eyes are formed, rather than on when the seed first fills the womb, or on what follows after the eyes have long been completed and the infant is about to emerge from the mother's womb. The same reasoning applies equally to the other limbs.

But if, disregarding all these considerations, one seeks some other beginning superior in authority and effectiveness, what could we propose as more reasonable than the moment the foetus receives a soul? For it is then that man begins to be, having attained the full nature of a substance, where he consists of both his matter and his form. If fate originates from the hour when a thing first exists, surely no hour could be more fateful for man than this.

However, if this opinion must be abandoned, there remains a strong probability that what pertains to the body should be referred to the seminal principle, what pertains to the soul to the very moment of animation, and what concerns external things and fortune to that particular moment when, having left the confinement of the womb, the man first enters the world and is exposed to the play of fortune.

Those who are divine may perhaps extricate themselves from this tangled and intricate ambiguity concerning the beginning of human life, but philosophy, relying on reason, can in no way properly resolve it. If philosophy is to affirm anything at all, it will affirm anything other than what astrologers have decreed – that the fate of a man depends on the hour of his birth. Astrologers were not led to this opinion by reason. Rather, they gave this moment the primary place because it was the moment they seemed most capable of determining. This is why some astrologers, in addition to the nativity, assign a role to conception, since they hope that something of it may also sometimes be known.

The remaining principles, the most fundamental, especially the moment the foetus is animated, astrologers entirely reject. The reason is clear: these moments are entirely unknown to them. If astrologers were to concede that human fates depend on such times, they would not be able to claim any ability to divine fate.

Setting aside other considerations, by what reasoning should nativity be preferred to conception and the animation of the foetus? If we assign the foremost place in determining fate to that which is first in time, the seminal principle, whence all other things proceed, is the primary beginning. If we judge not by time but by effectiveness and dignity, the moment of the foetus' animation must be preferred above all. Nativity is the latest, and possesses no efficacy or very little, for it neither initiates man, nor forms him, nor completes him, but merely reveals him when he has already been initiated and completed.

Chapter Three

Ptolemy attributes more to conception than to nativity. Ptolemy's reasoning proves that nothing should be attributed to nativity.

If the very words of Ptolemy are carefully weighed, we shall see he attributes more to conception than to nativity, although, in order to favour his profession, he tries to assert many things about the efficacy of nativity. His words in the third book of the *Apotelesmata*:

"When a temporal beginning of man is to be established, by nature that beginning will be when the seed is admitted into the generative womb. In potency and according to accident, at the hour of birth the infant emerges. Therefore, those who by chance or observation discover the hour at which the seed is admitted into the female, should follow that in discerning the properties of the body and soul, considering the configurations of the stars at that time. Once the seed is disposed by the affection of the surrounding air with a certain quality, varied throughout the successive stages of formation, it will be assimilated to the disposition of its first quality, since it naturally assumes only such matter as is most proper and akin to itself."

Here, Ptolemy speaks verbatim. In this passage, he pronounces, most explicitly and assertively, that the first, natural, and most efficacious principle of man is the admission of the seed into the female, and that this should be adhered to when one seeks to know the vicissitudes of men, both those pertaining to the body and those concerning the soul.

Ptolemy then carefully and anxiously resolves any objections that might arise concerning the alteration of the female. However, knowing his art would be jeopardised if he denied that man's fate could be determined from another source, he adds the following:

"But when the hour of the seminal principle is unknown – something frequently the case – it becomes necessary to follow the principle of nativity."

Let us weigh these things. Before we add anything, let us consider that he merely says the hour of nativity must be used when the hour of conception is unknown. Regarding the hour of conception, he says that one ought to adhere to it. Concerning the hour of birth, he refers to what is *necessary*. When the hour of conception is unknown yet one still wishes to divine a person's fate, one must necessarily resort to nativity.

It is clear as daylight. Ptolemy was not willing – but compelled by necessity – to adopt this opinion. He merely uses the hour of nativity as a second recourse (as the saying goes) after a shipwreck, as it were.

And thus far, he has spoken in accordance with reason. Soon after, however, lest he abandon his profession, he strives as much as he can to demonstrate that nativity, too, is a valid principle. Therefore, he adds:

"This, too, is a great principle, differing from the first only in that, from conception, even those things that happen before birth can be foreknown. Moreover, if one calls this a principle, but the other 'after the principle,' surely the latter will be secondary to the former in time, albeit more complete in potency. Indeed, by natural right, conception cannot be denied to be the generation of the human being, but nativity is that of the *man*, since at that moment

the infant receives many things it did not have in the womb – things proper to human nature. Although the hour of birth does not contribute anything to the nature of what the newborn will become, it makes manifest the disposition of the surrounding configuration, bringing it into the light. Once nature has perfected the infant, it gives only the impulse to exit, when the disposition is similar to the figure that originally formed the foetus.

Thus, it is reasonable that the disposition of the stars at the hour of birth should also have significance in these matters. Not because it is the cause of those things, but because, by necessity and according to nature, it corresponds in potency to that which is the cause."

These statements of Ptolemy have been faithfully recited. The first thing to observe is that the interpreter Avenrodan is wrong. He says Ptolemy speaks hesitantly in the earlier words where he discusses the efficacy of conception, but asserts firmly in later words, where he demonstrates the signifying power of the hour of birth.

On the contrary, Ptolemy affirms everything in his earlier words, without exception, without any doubt. Here he speaks with every kind of hesitation, now inserting 'almost,' now 'perhaps.' When Ptolemy concludes his argument, he defends the hour of birth as a significator of fate by arguing it is similar to the seminal principle. So far is Ptolemy from denying that conception determines the nature of the one born, he grants no more to the hour of birth than finding it similar to conception.

The opinion, widely accepted among astrologers and also believed by the interpreter of Ptolemy – that the hour of conception only signifies what happens to the foetus in the mother's womb – can easily be understood to have arisen from a false interpretation of Ptolemy's words. He did not merely cite those things signified by conception, but also those which the hour of birth does not signify.

"Conception," Ptolemy says, "excels over birth in that even those things that happen before birth can be foreseen through it."

If conception only signified things before birth, it would not be necessary to mention it. Nor would it excel as the first principle over the second, since governing the entire span of life is far greater than overseeing the rudimentary beginnings of a crude and formless foetus. If Ptolemy, in hesitantly and doubtfully expressed words, trusts that the power of the second principle is more effective, and that this is the principle of human life rather than that of human nature, he not only contradicts reason but plainly contradicts himself.

He contradicts himself because he could not defend the authority of conception in determining fate unless he devised an affinity between the seminal principle and birth. And later, when he provides rules for foreseeing the sex and other conditions of the one to be born, he says that these are to be predicted more from conception than from birth.

Albeit, it is highly unreasonable to call conception the beginning of human life rather than the beginning of the seed. For once the seed has filled the womb, it does not come into being but rather begins to be dissolved, as nature applies its hand to the formation of the human being. Just as conception is the principle of generating the human, so too is it the principle of the corruption of the seed.

Suppose birth is the beginning of the man. At birth, he first has things he did not have in the womb. Yet those do not pertain to his substance, which has already been completed and given, but only to the exercise of certain actions, which are not even proper to a human being. If these are the beginning of a person's fate, fate would arise long after birth, when the infant begins to think, deliberate, and reason. Immediately after birth, he has nothing proper to a human except crying.

Thus, the most prudent Ptolemy would not have insisted on such false and frivolous things, though he hesitated to set them aside entirely, lest he betray his profession. Nor are these the only points by which conception is preferred to birth. The assertion that birth has some power in determining fate holds little water.

The entire strength of this argument is reduced to the idea of agreement between birth and conception. But what is this agreement? What similarity is there?

Haly Avenrodan responds that the Sun at the hour of birth is always found in a sign that is the seventh, ninth, or tenth from the sign in which it was at the hour of conception.

Is this, then, the supposed similarity? O ridiculous vanity! As if one time would not be related to another in this way. The Sun, whenever it is, must always be a certain number of signs away from the place where it was at another time.

Is what is asserted about the Moon more probable? That its position at birth becomes the Ascendant of conception, and that the position of the Moon at conception then becomes the Ascendant of birth? This will be later demonstrated as false and fabricated. Haly Avenrodan expounds Ptolemy in his treatise on this very question. Just as Ptolemy sometimes speaks the truth, sometimes, Avenrodan says, Ptolemy is found to be false.

Let it be true; let it be false. Supposed agreement between the two hours will be more clearly and evidently refuted, since if you investigate the hour of conception according to that rule of the astrologers, and set up a chart for that time, the disposition of the heavens and stars is always different from it. Indeed, it is entirely indicative of things other than what appears to those calculating the hour of birth.

But why waste more words refuting such trifles?

Haly Avenrodan, a distinguished astrologer, openly confesses in the book he wrote on elections that the efficacy of determining fate lies in the hour of conception, but since this is unknown, astrologers resort to the hour of birth.

When pressed about the birth of twins, whose fortunes turn out to be different, astrologers say that sometimes the diversity of conceptions alters fate. However, if the hour of conception determines only what happens within the womb, it follows that those whose conceptions differ could indeed have different fortunes, but their birth could in no way be so.

Chapter Four

The universal fates. By what means astrologers investigate them, and how little the concept depends on reason.

We have spoken about the beginning of individual fate, how uncertain it is, and by what false reasoning astrologers have handled the matter. It remains to speak about the universal, namely how the fates of cities, nations, kingdoms, and the entire world are pronounced, which also (if granted to exist at all) is nevertheless uncertain and ambiguous, and has been improperly defined by our astrologers.

Astrologers predict universal changes by three main methods. From the great conjunctions of the superior stars or the eclipses of the luminaries. Or from the disposition of the heavens when the Sun enters the first degrees of Aries, which they have established as the beginning of the year. Or from the particular origins of cities, kingdoms, and nations, that is, from the hour when a city was founded, when a kingdom was established, or when a law was given to a nation by which it lives and is governed.

That these things are largely frivolous has been shown, not only when the entire efficacy of the stars was refuted but also when we demonstrated how the entire method of prediction from great conjunctions was unfounded. Whether predictions are derived from these or from the eclipses of the luminaries, expecting any event long after they have occurred is futile. Furthermore, we have exposed the impiety and madness of astrologers who subject the law of heaven to fate, and nations to the fate of their astrological laws. Likewise, we have shown how absurd it is to determine, as if it were a natural event, the birth date of a city or a kingdom.

But suppose fate exists for all things. From the fatal principle of these matters, nothing certain can either be defined or has been defined by astrologers.

First, in seeking omens for the fate of a city, by what reasoning do they proceed from the casting of a stone? For those who examine the fate of a city rather than merely its physical construction, the moment to be observed should be when the city began to be inhabited and governed by its own laws.

Likewise, regarding the fortune of a king, there is great disagreement. Some astrologers believe it depends on the hour he is appointed or chosen as king. Others think it is the enthronement or coronation that should be observed. But let us pass over these lesser details. Even Haly Avenrodan believes the fates of nations, cities, and kingdoms depend not so much on these things, but rather on the principles of great and universal constellations. On this point, we shall soon dispute on equal footing.

Chapter Five

The astrologer cannot predict in which region of the world some fate will occur, because it is uncertain which region is subject to which sign or planet.

If the so-called great conjunctions, and the eclipses of the Sun and Moon, bring about as great changes as astrologers fabricate, I contend that nothing can truly be predicted about these changes. Nor can astrologers escape those objections that may be raised: the uncertainty of the horoscope of a great conjunction, whether it belongs properly to that year in which it occurs, or the arbitrary observation of the beginning and middle of a luminary eclipse. Even if we grant all these points and make no dispute, we can press astrologers more effectively elsewhere, where the complete uncertainty of such predictions is demonstrated.

For these predictions rest upon four main points: first, that it be predicted what will happen; second, in what kind of affairs; third, at what time; and fourth, among which nations and in which places or regions.

There is no event, favourable or adverse, that does not occur at any given time. Every such prediction will be vain and futile unless a final point is ascertained: namely, in what place and in which part of the world these remarkable changes will happen. Astrologers define things so events are expected to occur in regions subject to the sign under which a conjunction of the stars or an eclipse of the luminaries has taken place. Ether that sign, or at least a sign of the same triplicity. This is the undoubted opinion of all astrologers.

It follows that nothing can be truly predicted about the fate of any region unless it has first been established which sign and which planet governs that region. Just as nothing can be foretold about a man's fate if the time of his birth is unknown. But if everything concerning the distribution of lands among signs and planets is uncertain among astrologers, it is most evident that their predictions about such matters must necessarily be most uncertain.

Indeed, anyone who has carefully read the books of Ptolemy and Albumasar will easily understand this, since there is no doctrine where astrology agrees with itself less. Ptolemy, in the *Apotelesmata*, says the fiery triplicity rules the north, the earthy the south, the airy the east, and the watery the west. Julius Firmicus Maternus, an imitator of the opinions of the ancients, follows this view. However, in the second book of the same work, Ptolemy explains this differently or modifies this division somewhat, assigning the fiery triangularity not so much to the north as to those lands situated between the north and the west, the earthy to those between the east and the south, the airy to those between the east and the north, and the watery to those between the west and the south.

Albumasar differs from this as much as the east differs from the west. In the sixth book of the *Great Introduction*, he assigns dominion over the fiery triplicity not to the north,

as Ptolemy does, but to the east. He contends that the watery triplicity dominates the north, to which Ptolemy had assigned the fiery, and the airy triplicity, which Ptolemy assigned to the east, he instead assigns to the west. The same view is held by Paul of Alexandria in his *Institutes of the Apotelesmatic Art*.

But this very same Albumasar, forgetting himself, expresses views in *On Great Conjunctions* so different from what he had written in the *Great Introduction* they are as different as the latter was to the doctrine of Ptolemy. Here, he does not assign the fiery triplicity to the north, as the Greeks, Ptolemy, and Maternus do, nor the watery triplicity, as he does elsewhere and as many Arabs do, but rather the airy triplicity. Whereas in the *Great Introduction* he gave the watery triplicity to the north, he now assigns it to the opposite region, that is, the south. To the west, he assigns not the watery triplicity as Ptolemy did, nor the airy triplicity as he did elsewhere, but instead claims the earthy triplicity dominates.

What could be more contradictory than these opinions? Who will set himself up as their arbiter, when neither reason nor experience can demonstrate the truth in this matter?

Henry of Mechelen says this last opinion of Albumasar is the truest and has been confirmed by many experiences. On the other hand, Alchabitius, Zael the Israelite, Abraham Ibn Ezra, and Saphar in the *Isagogics*, as well as Mashallah, approve of the one written in the *Great Introduction*. Avenrodan, rejecting both, places Ptolemy's opinion above all others.

Even among the ancients themselves, there were disagreements on these matters. The Egyptians differed from Hipparchus, and Hipparchus from Ptolemy. I will illustrate this with a few examples. The Egyptians assigned ancient Babylon and the part of Arabia bordering Egypt to Aries, whereas Ptolemy subjected Britain, Gaul, Germany, Histria, and Palestine to it. Hipparchus and the most ancient astrologers, using a more precise method, assigned different parts of the sign to different regions. They attributed Babylon to the left shoulder of Aries, Thrace to the right, Arabia adjacent to Egypt to the Armenian part, Persia and

Cappadocia to another part, and Mesopotamia, Syria, and the Red Sea to yet another. For the other signs, there is similar discord: the Egyptians, Hipparchus, and Ptolemy disagree no less than Albumasar does with himself.

From this, it is clear and evident astrologers can pronounce nothing with certainty about where in the world some event will take place, since they have not settled the division of lands and nations among the signs.

Chapter Six

A single beginning cannot be established upon which the fates of the whole year depend, since different beginnings of the year are set by different peoples, and according to the Hebrews, the year begins in autumn rather than in spring.

It remains to speak about the beginning of the year. A single beginning cannot be established, whence the state of the whole year may be predicted. Ptolemy states this explicitly, so I will confirm it with his own words, rather than mine. He writes in the second book of the *Apotelesmata*:

"In a circle, no one can conceive of a beginning in an absolute sense, but in the Zodiac, one may justly establish those beginnings determined by the equinoxes and solstices, which are four, two equinoctial and two solstitial points. However, in this matter, there is hesitation as to whether any one of these four should be preferred. If you consider the circular nature itself in an absolute sense, none will obtain the privilege of being a singular beginning. But those who have written on these matters have been moved differently by one or another of these four as a beginning, each in accordance with its own proper reason and natural agreement.

For each of these parts has something peculiar and outstanding, whence they seem to claim for themselves the authority of beginning the new year. The vernal equinox, for instance, because the day first begins to become longer than the night, and because that time of the year abounds in moisture, a quality and nature which (as we said earlier) is most prevalent in the beginning of all things that are generated.

The prerogative of the summer solstice is this: at that time the day is extended to its greatest height, as if to its peak and completion. Moreover, among the Egyptians, the Nile then floods, and the Dog Star rises.

At the autumnal equinox, all fruits are gathered, and seeds are sown into the earth.

At the winter solstice, after the decrease, the day then first begins to increase.

However, what seems more fitting and harmonious with nature is this: in the observation of the year, we use four principles, observing what immediately precedes them, the conjunctions or oppositions of the Sun and Moon, and especially eclipses, so that from the beginning taken from Aries, we foresee what the spring will be like. From that taken from Cancer, the summer; from Libra, the autumn; and from Capricorn, the winter."

Thus speaks Ptolemy.

It thus appears that Ptolemy believed no true beginning can be established, whence the fate of the entire year may be foreseen. I cannot but greatly wonder at Avenrodan, his interpreter, and the younger astrologers, who repeatedly assert that Ptolemy attributed more significance to the beginning of the year at the vernal equinox than to either the beginning of autumn or the solstice.

Just as Ptolemy says the vernal equinox lacks anything that would merit the privilege of being the beginning, he likewise applies the same reasoning to the others. After showing all have the authority of an initial point, he determines that none holds more weight than

another, but that all must be equally observed – affirming that this is more fitting and more in harmony with natural principles than observing one while disregarding the others.

Since each has its own justification for why it may rightly be considered a beginning of the year, different peoples have started their year from different points. The Egyptians from the equinoctial solstice, the Romans from the winter solstice, and others from the autumnal equinox – that is, from the entry of the Sun into Libra – while also observing the hour in which it traversed the twentieth degree of Scorpio, believing this held great efficacy and significance for predicting the state and changes of the air. This view was followed by Saphar and Aoniar.

Some, in accordance with the opinion of the Egyptians, wish those four beginnings be considered, but not so that all are observed in all things. Thus, when the Sun enters Aries, they consider the state of the Sun itself; when it enters Cancer, that of Jupiter; when it enters Libra, that of Saturn; and when it enters Capricorn, that of Mars – since they believe these stars reign in those signs.

Albumasar, however, devises another hallucinatory fever-dream for himself. That if, when the Sun enters the first minutes of Aries, the Ascendant is in a fixed sign, then from the celestial disposition of that hour, the entire year may be predicted. If it is in a common sign, two beginnings of the year should be established. If it is in a movable sign, four. These notions are entirely vain and arbitrary, supported neither by reason nor by the authority or experience of the ancients.

Suppose someone wishes to confirm the astrologers' opinion by the creation of the world. The future fate of the year might be known from the Sun's entry into Aries, since God created the world at that time, and the revolutions of years would be nothing other than the revolutions of the world's nativity. But that person can then be refuted easily and

immediately. For if we were to follow the world's nativity, the beginning of the year would depend on what time of the year the world was created.

The Hebrews, from whom we have received the account of the world's creation, do not define anything certain concerning this matter. Some assert the world began in the spring, others claim the autumn. If one opinion is to be preferred, they incline towards the autumn.

The statement that the month in which the Passover was celebrated was to be the first of the months of the year, they interpret as being written with respect to the observance of solemn festivals. If that solemnity were the greatest, first, and most important, from which the Exodus from Egypt – the first of God's benefits to their people – was followed by all others, they would begin from September. This seems confirmed both by the sacred writings and by ancient Jewish customs.

In Exodus the Feast of Booths, that is, the Feast of Tabernacles, is celebrated 'at the end of the year,' yet it is observed in the middle of September. And in the Book of Nehemiah, it is written: 'And it came to pass in the month of Chislev' – which among the Chaldeans corresponds to December – 'in the twentieth year'; and then shortly after: 'And it came to pass in the month of Nisan,' which is April, 'in the twentieth year.' But if the month of Nisan, that is, April, were the beginning of the year, it ought to have been written not 'in the twentieth year,' but 'in the first and twentieth year.'

Furthermore, since it was decreed by law that in the seventh year, the sabbath of years, the Hebrews were neither to reap their fields nor sow them, if the beginning of the year were in April, it follows that what had been sown in October of the sixth year could not be harvested the following summer. That summer would belong to the seventh year if its beginning were reckoned from the spring. The seeds sown in the sixth year would be lost, an inconvenience that would not follow if the year were reckoned from September.

I pass over Lesiensis' *Computus*, and Bede's *The Reckoning of Time*, and Flavius Josephus in the first book of *The Antiquities of the Jews*, and St Jerome in his letter *On Solemnities.* While interpreting Ezekiel, they state that October is the first month and January the fourth.

From these considerations, it is clear – whether we conjecture from the creation of the world or follow the reasoning and authority of the ancient astrologers – that astrologers are mistaken in claiming the entire year can be predicted from the Sun's entry into Aries.

Chapter Seven

Concerning directions and other methods by which astrologers determine the times of future events, and how little they agree. How much astrologers differ among themselves.

Just as astrologers err in forecasting the fates of the year (if any forecasting of fate is possible), so too they err in determining the time of those events promised by the initial hour. They employ frivolous, false, and vain suppositions in no way consistent with natural methodology.

Among these, the first and foremost concerns the directions of the planets and the divisions of the zodiac (thus I will call them, so those with whom we dispute may better understand). We will briefly reveal what false and ridiculous foundations these concepts rest upon, setting forth the opinion of astrologers on this matter.

Suppose that in the nativity of someone, the Ascendant is at the fifteenth degree of Leo, and Saturn is positioned at the sixth degree of Virgo. Saturn is not connected to the Ascendant either by aspect or by other means. Therefore, it should not harm it. Nevertheless, astrologers claim that at some point, by direction, the Ascendant will reach Saturn, and in the year it does so, the person will be in danger of illness due to Saturn.

They rely on the following reasoning. Since each year a single degree of the signs is attributed to us (according to the proposition of *anaphorae*, irrelevant to the present discussion), they assert that in the first year of life, the degree in which the Ascendant is located is to be counted.

If in that degree a beneficent planet is present, either by its body or by its rays, it will bestow its benefits in that year. Conversely, if a malefic planet is present, it will bring evils. In the second year, the second degree is considered, in the third year, the third, and so on. Hence, if Saturn occupies the twenty-first degree from the Ascendant, that degree corresponds in the twenty-first year of life, so it follows that this year will be afflicted by the baleful rays of Saturn.

If astrologers wish to foresee in which year something good or bad will happen to the person, they measure the degrees between the principal places of the nativity and the body or rays of a benefic or malefic star that lies between. The number of degrees determines the number of years after which the event shall occur. This doctrine concerning directions is utilised by Ptolemy, as well as the multitude of astrologers, to pronounce the span of life, and all misfortunes and changes of fortune.

What could be more frivolous? What could be more irrational? That distribution of degrees into years – could it be more arbitrarily contrived, conceived without any foundation in science or reason? Especially since, whenever it suits them, astrologers claim degrees sometimes indicate years and sometimes days. This might have some degree of plausibility if the partition of degrees were natural; however, it depends entirely on arbitrary choice. Mathematicians divide the signs into thirty rather than twenty parts for no reason other than that this number is more convenient for arithmetical divisions. This will be demonstrated with the testimony of astrologers themselves in the next book.

But how could Saturn, located in the sixth degree of Virgo (as was assumed), harm me when I was born, even if we grant that its influence should pertain to me in the twenty-first year of my life? For when Saturn's influence is supposed to affect me, it will not be there, and when Saturn is there, that degree will no longer pertain to me.

Perhaps astrologers might claim – just as clothes infected by plague do not lose their poison for some time – that the same happens with parts of the heavens, so they retain the contagion of a malefic star. Therefore, the degree, having been infected by Saturn at the time of my birth, reflects harmful influence back onto me, even after many years.

I might commend this theory as cunningly devised and subtly defended. If the discussion were with philosophers, I would remind them that an affection of light does not adhere to the subject, but departs along with the body whence it is diffused. Indeed, of all celestial impressions (as Avicenna says regarding meteors), light is both the vehicle and the formative agent.

But let astrologers answer this. Each year, in the intervening time, other planets pass over the same degree. Do they think the malignant infection is weakened or erased by the arrival of beneficial lights? If the qualities received and absorbed from the planets persist in particular regions of the heavens, and are not preserved merely for a brief span, then in judging the effects, it is insufficient to merely observe the location of a planet – whether during the revolution of a year or at the hour of nativity. One must also observe which planets traversed those same locations in preceding years.

This whole notion of directions subjects oneself not only to existing constellations, but also to those that *could* exist. Could the Moon, struck by the hexagonal rays of the Sun at my birth, at some point in the future produce misfortune due to the square aspect of the Sun – a configuration not present at my birth, but would have been, had the Moon stood farther

from the Sun? After many years, when the Moon traverses those parts that distanced it from the square radiation, will calamity then be inflicted?

Such a constellation did not exist at my birth. If it exists at some later time, it is of no concern to me, since if there is any fate for me, it was assigned by the prior disposition of the heavens.

It is therefore evident how absurd, how false, how inconsistent is the doctrine of directions, which astrologers use daily. Have they ever truly examined its foundation? Or from what principles it is derived? I suspect they have not.

Beyond directions, astrologers also employ planetary rulership in predicting the timing of events, assigning to the planets, in a certain order, dominion over life.

The *centra* of the Chaldeans, the *fridaria* of the Persians, the *novenarii* of the Indians, the *tecates* of Ptolemy, the *aphopria* and *occursorae*, the *decennia* of the Egyptians, the *carnocratores* of the Arabs, and whatever else different peoples have fantasised according to their whims – all err in the same incongruity. They define the influence of the stars so that one planet rules over us for a certain number of years. When that time is completed, it hands over the reins of government to the succeeding planet, either according to the order of the spheres or the climate, as if passing authority from hand to hand. This planet, in turn, after exercising its jurisdiction for the allotted time, cedes its right and power to the next star.

But this is entirely contrary to all natural reason.

Why this, rather than that, should dominate, no cause can be unearthed. Except perhaps that the arrangement of matter is more suitable for the impressions of one star than another. Or perhaps we see the more effective relation of the star itself, so it is directed towards the Earth, placed below the Earth, or tilting towards the northern regions, thus becoming nearer to our region, or casting more direct rays.

Suppose we agreed with astrologers regarding the good or bad conditions of things, according to the variety of places, signs, and radiations. Then the planet holding the greatest authority and power in the sky is the Sun, which is only natural. The rest is mythical nonsense. 'If Jupiter now rules the Earth, Saturn ruled in the preceding years, whom Jupiter follows in the order of the spheres, and Taurus rules this year, because the preceding was ruled by Aries.' As if the vicissitudes of the Earth were found in the stars.

Astrologers might appeal to empirical experience. It could be that a certain star governs particular times, if our writers actually agreed with each other. But one assigns years to the Moon, another to Mars, and another to Jupiter, so faith in the experiment fails. The Egyptians, whom Julius Firmicus Maternus follows, assign the administration of life to each of the stars with an equal division of ten years and nine months, so that in the diurnal nativity, the Sun first receives the decade; in the nocturnal, the Moon. Afterwards, the star becomes the ruler of the entire decade, yet the Egyptians divide the whole substance of the decade among all the stars, in order. The cycle of the governed years is seventy-five years, with the addition of three months.

The Persians count the same number of years. If someone is born during the day, they assign the Sun, at night, the Moon, as the starting point and main ruler of the time. Other stars are participants in a secondary succession, called *fridaria*, whence it is commonly said among younger astrologers that someone is a participant in the *fridaria* of Jupiter. However, the Persians greatly differ from the Egyptians, for in the succession of the planets, they do not observe the places of the natal chart, but the order of the spheres, making the Sun the centre. They do not assign equal time to each planet. To the Sun, they assign ten years, to Venus eight, to Mercury thirteen, to the Moon nine, to Saturn eleven, to Jupiter twelve, to Mars seven, to the Dragon's Head three, to the Tail two. As to the reasoning behind this, Ibn Ezra himself admits it is becoming outdated.

On the other hand, in ascending participation of dominion, the Persians assign an equal portion of time to each planet, so the principal planet governs one seventh of the time. The second seventh is governed by the planet second to it, and the third by the third.

The Egyptians make this distribution unequal, assigning to the Sun nine or ten months, to Saturn thirty, to Jupiter twelve, to Mars fifteen, to Venus eight, to Mercury twenty, and to the Moon twenty-five. They further subdivide this, allotting six days out of its thirty months to Saturn, distributing the rest among the remaining planets, and doing the same for their other months, as Hephaestion teaches, though Maternus was unaware of it.

But this practice was common among the Persians and Egyptians. The former count the head and tail of the *chronocrator*, whereas the Egyptians do not. From all this, it follows that after the first decade, it is rare for the same ruler of the years to be found among both the Persians and the Egyptians.

Ptolemy differs from both. He enthrones his lords of the ages, such that the Moon governs the first four years, Mercury the next ten, then following in sequence: Venus for eight, the Sun for nine, Mars for fifteen, Jupiter for twelve, and Saturn for the remainder of life. As he seeks a precise and specific distribution of times for each nativity, Ptolemy adds to these principal *chronocrators* their yearly, monthly, and daily rulers.

In these matters, Ptolemy places the pivotal point of all fate. Indeed, he censures those who make a single *chronocrator* of life, referring to the Egyptians and Dorotheus of Sidon. If anyone adheres to Ptolemy's opinion, he will always determine the distribution of times very differently from the Egyptians and Persians.

Thus, it is all the more amusing to ridicule the astrologers of our age, who misunderstand Ptolemy. His *tecates* and *chronocrators* belong to the same category as the *fridaria* of the Persians and the *decennia* of the Egyptians, and yet they use all these methods mashed together, as if they were not contradictory systems.

Concerning other matters, astrological opinions are in no way consistent. The astrology of the Indians recognises neither *fridaria*, nor *decennia*, nor *tecates*, nor *chronocrators*. It divides life not into seven parts, as others do, but into nine sections.

The Indian system pronounces judgements according to the arrangement of houses in the chart. The first part of life is governed by the constellations pertaining to the twelfth house, the second by those related to the Ascendant, the third by those of the second house, the fourth by those of the ninth, the fifth by those of the tenth, the sixth by those of the eleventh, the seventh by those of the sixth, the eighth by those of the seventh, and the ninth by those of the eighth.

Not only do astrologers disagree in the distribution of time, but they also disagree in the very partition of houses, dividing them according to the degrees of the zodiac (which they call equal). The Arabs, imitating Andrugazar, judge life's three parts by *trigonocrators*, 'triangulators,' that is, rulers of the triplicities. The Arabs determine the past and future condition of matters signified by the twelve houses in this way: from the first ruler of the triplicity, the first part; from the second, the middle part; and from the third, the final part. However, since one trigon has only two rulers, as we mentioned in another book, or perhaps there is only one disposer for a given nativity (albeit one for the diurnal and another for the nocturnal) it would result in a large portion of life being left without a governor.

But *trigonocrators* do not exist. Even if there were three thousand, such a system of succession in planetary governance is utterly ridiculous.

The Chaldeans devised something very different again. They do not use *tecates*, nor *decennia*, nor *fridaria*, nor the *novenarii* of the Indians, nor *trigonocrators*, but rely on the cardinal points of the nativity. They assign the first part of life to the first cardinal point, the middle part to the culmination of the heavens, and the last part to the west. Concerning death

and events that follow after death, they pronounce judgements based on the fourth point of the chart.

They also divided that earlier threefold division, so the *apoclima* of the Ascendant (one might say 'decline') indicated the pains of childbirth and the fate of the mother while she carries in the womb. The Ascendant itself signified the birth and the earliest years. The *epanaphora* of the Ascendant signified the remaining part of the first age.

The *apoclima* of midheaven signified the first parts of middle life. The midheaven itself the middle years. Its *epanaphora* the final parts.

They did the same for the fourth point. The declining house preceding it indicated what immediately precedes death. The fourth point itself signified death. Its *epanaphora* indicated what might happen after death.

I have explained these opinions so that the contradictions may be recognised, and no credence given to their supposed empirical basis. At the same time, I wish to expose the vanity of astrological doctrine, which rests on the most trivial conjectures and arbitrary assumptions.

How shall we assign the first part of life to the Ascendant and the middle to midheaven, when middle age follows early life, yet the midheaven does not follow the Ascendant but precedes it?

But no need to labour in refutation, for these doctrines contradict and destroy one another. If I were to recount all their fantasies, there would scarcely be any end to it.

Mashallah governs the first half of life by the eastern Sun, the second by the western. Hemus takes a different view, assigning the first half to the planets in the upper hemisphere, whether eastern or western, and the second half to those planets beneath the earth.

Vettius Valens, with another fiction, attributes the first part to the Moon, the second to the ruler of the second house. Albumasar, the most inclined to nonsensical fables of all,

claims the first part should be referred to the Part of Fortune, and the second to its ruler. Others have different opinions, but it is not necessary to pursue them all. Read Hephaestion in the *Apotelesmata* of Ptolemy. Read Haly Abenragel. You will find there many other conflicting opinions, since each astrologer composes his own tale as he pleases.

People too readily give credence to these writers, as if they were oracles and prophets. We enslave our faith to the most deceitful and fraudulent charlatans, entrusting to them our hopes, fears, anxieties, joys, and – worse – the conduct and governance of our lives.

Chapter Eight

Just as astrologers ascribe inefficacy, so they omit what is necessary. How greatly they err concerning the fixed stars.

Astrologers adopt many fictitious things. Things that have no nature, so no influence. Signs, houses, images, the tail and head of the Dragon, parts, *dodecatemoria*, *novenarii*, and other inventions of this kind. And yet they omit much that is necessary, and derive much that is false and contradictory with what they do use.

Just as that which lacks light is ineffective, so there is no heavenly light that is ineffective. Near innumerable stars shine forth from the eighth sphere, and yet astrologers use only a thousand, with the addition of twenty-two. When they encounter this difficulty, different authorities resolve it in different ways.

Pietro d'Abano, in the *Lucidarium*, pleads that this merely demonstrates the difficulty of the astrological art. It does not prove it impossible. In saying this, d'Abano concedes that knowledge of the fixed stars is necessary if a fatal constellation is to be comprehended. Since this is difficult, it follows that the art is difficult.

But we contend that it is impossible for all the fixed stars to be discovered. Indeed, if it were possible, astrologers – who have not yet accomplished this feat – would still not truly predict the future from the heavens.

Other writers, seeking a safer refuge, claim the stars they omit are ineffective. All the greater ones, with the power of determining fate, are known to astrologers. The ones left out, due to the smallness of their bodies, have almost no significance.

But our quarry is easily dragged from its hiding place. If astrologers have never observed these stars, what can they assert about their nature? Whether these stars act or do not act? Whether they change or do not change? If astrologers defend themselves by citing the smallness of the stellar bodies… what celestial body, when compared to the Earth, can be considered small? Or, more correctly, when compared to those things on Earth that astrologers believe are governed by the heavens, which stars are ineffective and weak?

If you compare celestial and terrestrial bodies, in one you find nothing but what is lofty, powerful, and great. In the other you find nothing but what is lowly, weak, and small. Moreover, many of these small and disregarded stars are perhaps not outmatched by the globes of Mercury and the Moon. The fixed stars astrologers do observe are by no means all thought greater than Mars and Venus.

Though smaller stars might not have great power as individuals, a gathering and conjunction of many together might have vast influence. Consider those that compose the Milky Way, densely packed with so many lights – if individual stars can act in separation, how can they have little power when acting together?

In music, a melody is often disrupted if a single small note is removed. That note by itself may scarcely be heard, but when included it causes the others to be heard more sweetly. The entire order of the heavens, bound together in harmony and mutual agreement, has

nothing that is idle, superfluous, or useless. To remove even the smallest part is to lose the whole integrity.

Among those who row ships, a man who is not particularly strong can still contribute, so that if his hand is missing, the ship will not be rowed. In the same way, astrologers' ignorance of even a single star undermines the truth of their predictions. But they leave out an innumerable number without concern.

Guido Bonatti, perhaps fearing these things (if indeed he fully understood them), says: "The astrologer uses all the stars, even if he does not name them all explicitly, for he uses the twelve signs under which almost all stars are comprehended."

But who would say this – not an astrologer, but a madman?

The so-called twelve signs have only a certain breadth of degrees, beyond which countless stars lie on either side. If Bonatti responds that those stars extended within the same lines share the power of a given sign… how does he make assertions about unknown matters?

If he says this is the proper claim of astrologers, I will not object and will refer him to the astrologers themselves. Among astrologers, some propose the images arising with the signs are one thing. The signs themselves are another. The signs are immovable, whereas the images change their location.

Therefore, an image corresponding to one sign will have one nature. The same image when corresponding to another sign in a different place will have another nature.

But even Bonatti realises the absurdity of this response. He immediately digresses. When he sees that the knowledge of all stars must be relevant to astrology, with astrologers lacking such knowledge, he says:

"What if we do not know the entirety of astrology? Christian preachers do not know all divine matters, yet they preach to the people about them every day."

See how Bonatti deceives himself! If someone inquires into the nature of the stars for the sake of knowledge, as a philosopher does, knowing even one star is an accomplishment. But if he professes astrology, he does not seek knowledge of the stars themselves, but rather knowledge of the future through the stars. He accomplishes nothing unless he knows those stars whence the future can be foreseen. But the future is foreseen from those causes by which it is produced. If it is produced by all stars, then it is foreseen by all.

Therefore, whoever does not know all stars, though he may know some, will never foresee the future through them.

An example can be found in medicine and philosophy: the philosopher seeks the powers of herbs so that he may understand them. The physician inquires so that he may heal diseases through the power of herbs. If a philosopher discovers the nature of even one herb, he will be a philosopher, though imperfect, since he has some knowledge of what he seeks.

But suppose there are ten species of herbs (or however many you prefer), each so necessary for curing disease that if one were missing, no bodily ailment could be healed. If someone knows nine but is ignorant of one, he will not only be an incomplete physician but no physician at all. He may have some knowledge, but cannot provide the healing that a physician professes.

Likewise, an astrologer cannot be called an astrologer if he cannot speak about the fate of even a single person by examining their natal chart. If fate is determined by the combined influence of all stars, how will an astrologer foresee it if he lacks knowledge of what individual stars contribute, and what results from the combined temperament of all?

As for theology, the case is different. Just as it is impossible to know it perfectly, so it is also unnecessary – it is merely enough that we may believe, understand, and persuade others about many things concerning it. Just as it is impossible to know everything

theological, so too is it nearly impossible to know nothing. Those with eyes may see the Sun, even as none perceive it completely.

But enough has been said in refuting the nonsense of the most unlearned charlatan.

Chapter Nine

The doctrines of the astrologers about the fixed stars conflict both among themselves and with the truth.

Astrologers not only err in their ignorance of many stars. Even concerning those they examine, they articulate contradictory and false doctrines. As I shall demonstrate, at times they declare the fixed stars to be more powerful than the planets. At times they deem them less potent and effective. In this matter, astrologers not only contradict themselves but also diverge from the truth. They promise ordinary happiness, so to speak, according to the capacity and condition of the one being born, from the good position of the planets. Yet, as per the words of Ptolemy, from the fixed stars, they expect even greater happiness.

However, I, following Proclus' commentary on Plato's *Timaeus* and affirming by reason, maintain that the planets provide greater effects than the fixed stars. Higher position does not indicate a nobler nature for the fixed stars, since the ruler of all, the Sun – if not all, then all except the Moon – has many stars placed above it.

The argument for why the planets surpass the fixed stars is this. A single planet is carried by multiple spheres, whereas a single sphere carries many fixed stars. The great multitude of those stars together surpasses the power of a single planet, yet individual fixed stars cannot surpass individual planets. Considering the size of celestial bodies, the Sun is indisputably the largest, and likewise Jupiter and Saturn exceed all others, except for certain

particularly large stars. But neither is greater potency understood merely from the vastness of bodies.

It has not been determined that Jupiter is more powerful than Saturn, although it is larger. And though Mercury is the smallest of all stars, it nevertheless (as astrologers themselves claim) possesses the greatest influence in every nativity. Nor do they place Venus before the Moon, although it is surpassed by it in vastness of body.

Finally, that bright star at the heart of Leo [Regulus], called *Regina* by the Latins and *Basiliscus* by the Greeks, is not of the first magnitude. It is nonetheless considered by astrologers to possess the highest authority and power. They judge it more noble precisely because it has not deviated from the Sun's path. By the same reasoning, the planets should be considered more noble than the fixed stars, since they deviate less from that same path in either direction.

Furthermore, ancient tradition supports this view, as it calls the planets *cosmocratores*, 'rulers of the world', a title never bestowed upon the fixed stars. But astrologers do not uphold their own doctrine, and often contradict themselves regarding the very stars they declare to be the agents of marvellous effects, speaking of them at other times as if they were weak and powerless. For they claim the fixed stars produce no effect unless they occupy the angles or beginnings of houses, or are joined to one of the luminaries.

Having attributed so much to the fixed stars, astrologers now detract so greatly from their power that they assert these stars achieve nothing unless strengthened by the position of a particular location or by the aid of a most potent planet. Astrologers offer neither a reason nor any probable explanation for this. Instead they seem to have fallen into error through a false interpretation of some ancient saying.

Specifically, the ancients (as Maternus teaches) used to say that when the signs were bare of stars, they had no efficacy except for those occupying the four cardines (pivotal

points). This teaching, applied to the signs of the stars' mansions and abodes, astrologers also transferred to individual stars. They thereby astutely established a doctrine, lest, if fate must be explained by all the stars, their entire profession be tormented by inextricable anxiety, which could not be overcome by mere mortals. Nor could they easily convince the credulous. Otherwise, why the opinion that individual fixed stars have little influence?

Is it because such stars are more remote? But how much closer to us is Saturn? What is the great prerogative of a pivotal point such that within it a star performs wonders? And yet with the vastness of distance posing no obstacle, as soon as the star declines slightly from the pivotal point, or has not yet reached it, there is no effect at all. Even the eleventh house, rising to the heights of the sky, seems more powerful than the fourth house, situated beneath the Earth's centre.

But it is certainly as we have said. Labour deterred our astrologers, nor did they wish the art to appear so difficult as to be judged impossible. For when they bring forth the slowness of motion, slowness is of no consequence, since the ray of a star is all the more firmly fixed, and adheres more persistently, the longer the star remains in place.

In this they contradict themselves, since they establish a doctrine regarding the slower-moving star – that whatever it bestows is true, and what it grants lasts and endures for a long time. Yet, concerning the fixed stars, astrologers determine that, though they move with the slowest motion, such stars bring the greatest happiness, but in the end this happiness bring calamities. Therefore, the gifts of the fixed stars do not last long, just as they are not preserved for long. But just as their opinions always vary, astrologers are everywhere inconsistent with themselves – although we do not pursue all their contradictions.

Some might ask, just as astrologers consider aspects among the planets, why they do not consider the interval of aspects between the fixed stars. Regiomontanus, noting this, suggested the aspects of these stars are even more perfect than those of the planets, since,

unlike the latter, they are not fleeting and momentary but rather stable and perpetual. Other objections might be raised on these points, but let us proceed with what follows.

Chapter Ten

The astrologers are also mistaken about the planets. A repetition of those things which have been disputed thus far.

How greatly astrologers are mistaken, even about the planets themselves, has been sufficiently demonstrated above.

Just as they err regarding the fixed stars, astrologers believe the properties and powers of planets are not only intensified and diminished but also altered and made different, according to the variety of places, the condition of the signs, the configurations, the multiple relationships, and the various designations of planetary motion, whether stationary, advancing, or retrograding. We have most clearly shown (unless I am mistaken) this to be far from all truth, far from reason, far from dignity, and far from the nature of celestial things.

The notion that the planets and the twelve signs rule in turns, and that their dominion, as if handed down through succession, governs various matters and times by a right of inheritance, is not so much measuring celestial things by human standards as fabricating falsehoods. We have laughed, and, along with Plotinus and his contemporaries, have refuted those who wait as many years for the effect of a planet as the number of degrees separating it from some point in a sign. Astrologers concoct a thousand falsehoods on this matter, conceived without any foundation in science.

Therefore, summing up the entire discussion, we conclude that astrologers may seem to speak plausibly when they say lower things are ruled by the celestial. However, they are soon found to be false, vain, and detestable, neither pious nor philosophers, since they insist

particular things can be produced by universal causes, evils by goods, small things by great ones, reckless things by orderly ones, incorporeal by corporeal, arbitrary by necessary, artificial by natural, present things by past ones, and past ones by present.

Even if all these things were caused by the heavens, astrologers would still assign causes more false than celestial. They remain silent about the true powers of the stars and constellations, yet ascribe properties to that which is not real. They grasp only a tiny part of reality, while adding fictitious elements. Houses, images, nodes, *antiscia*, parts, *dodecatemoria* – we have mentioned these in the preceding book. Things fabricated, ineffective, and imaginary, lacking any solidity in nature.

If a wise man places faith in such things, as though they possessed the solidity of nature and ruled over us, he has not yet understood what it means to be wise.

Here ends the seventh book of Giovanni Pico della Mirandola's Disputations Against Divinatory Astrology.

Disputations Against Divinatory Astrology

By Giovanni Pico della Mirandola, Count of Concordia

Book Eight

Chapter One

According to astrologers, the power of determining fate depends upon celestial bodies. It is uncertain how many such bodies exist.

Among the things necessary for those who profess knowledge of the stars to know, the easiest is the matter just discussed. That which determines the fatal hour of a particular thing – if lower things go unaffected by it, how will astrologers understand more difficult matters? Much more onerous to understand is the number of higher bodies that determine fate, so that, when analysing the fatal constellation, nothing fictitious is added nor anything important omitted. This would be useful knowledge, but, alas, not attainable, as we will show in the present book. Astrologers are unable to predict the truth, because they do not see the positions and motions of the stars clearly, and have not explored them all thoroughly. We will comment upon this in the following books.

Because it is unclear which bodies must have their positions examined, and which properties must be sought, the promises of the astrological profession come to naught. Astrologers do not even know those things of which knowledge is necessary.

If they insist we are deceived or that we hurl false accusations, I will call them to account with a divine voice. Let them comment upon the number of stars, for the stars are not comprehended merely by the number we see, and I do not know if there are others in the sky, avoiding our senses and our reason.

Consider the words of the philosopher Favorinus, in his elegant speech against astrologers, as recorded by Gellius. Amazed at the conventional wisdom, Favorinus argues that the planets, which Nigidius calls wanderers, may be more numerous than commonly thought, for it is possible that others exist, of equal power, which humans cannot see because of dimness or distance. Indeed, Alpetragius, the wisest of men on celestial matters, says if there is unknown motion in the sky, a celestial body possibly exists to which that motion particularly belongs. A body hitherto undetected by observation.

The movements of the higher bodies now described by younger philosophers were unknown to the ancients. These details were eventually discovered after a long period of daily observation, which bears witness to the fact that other motions, perhaps slow or obscure, might still evade mathematical scrutiny. Maybe posterity, after prolonged observation, will eventually recognise and describe them.

I shall not discuss epicycles or eccentricities, nor the multitude of spheres of the planets, though all astronomers are uncertain on this matter. Perhaps in these bodies there will eventually be found power in deciding fate. About the spheres above the planets, ambiguity arises, and this renders the astrologer's divinations even more uncertain. For some make the eighth sphere, illuminated by the fixed stars, the outermost. Others place a ninth above it, and still others a tenth.

The astronomers of the Egyptians and Chaldeans believed there was nothing above the eighth sphere, followed by Plato, Aristotle, Hipparchus, and Ptolemy. The younger authorities do not agree, but this is how the matter stands. There is no ninth sphere in Ptolemy's system, which can easily be understood from his *Great Composition*, the *Almagest*.

Many are mistaken in this regard. They believe all who acknowledge the eighth sphere moves from west to east must necessarily acknowledge a ninth sphere. Since both Ptolemy and Hipparchus admit this motion of the eighth sphere, more recent astronomers

think those who first recorded that motion also believed in the ninth sphere. Ptolemy also uses both movable and immovable signs. He makes the images of the eighth sphere movable and refers the locations of the planets to the immovable signs.

To erring modern interpreters of the ancients, it seems certain and beyond doubt that, besides the moveable signs of the eighth sphere, there are other signs (according to Ptolemy) that do not move, except by the motion of the whole world. These are conceived to exist above the eighth sphere.

However, this view is greatly and profoundly mistaken. The motion of the stars from west to east does not necessarily lead to a ninth sphere. What is said about the immovable signs most clearly demonstrates that Ptolemy was content with the eighth sphere alone.

What I find remarkable is people have so misunderstood this. Ptolemy describes immovable signs within the eighth sphere itself, which he would not have done if he had conceived of a higher sphere. His words in the second book of the *Almagest* are as follows:

"We use the names of the signs in the twelve parts of the oblique circle. As if their beginnings were taken from the tropical and equinoctial points, we shall call it the *dodecatemorion*, that is, the twelfth part, from the true equinox to the following part of the whole sphere, Aries. The second, Taurus. Similarly, in succession, according to the order of the twelve signs handed down."

Thus speaks Ptolemy. He reiterates the view in the first book of the *Apotelesmata*. The parts of the zodiac to which the planets are referred are determined and named according to the solstices and equinoxes. These four points, fixed and immovable, also establish a fixed and immovable division of the signs, but the images whence those names are derived are in constant motion. In the course of time, their boundaries and beginnings vary.

Therefore, these immovable signs, according to Ptolemy, are not in a higher sphere, but are defined by the four fixed and immovable points of the eighth sphere. If he had

conceived of another sphere above, he would not have remained silent about so great a discovery in his *Almagest*.

It is amusing to ridicule John of Saxony. In his commentaries on Alchabitius, John strives to prove the signs of the ninth sphere must be used according to the opinion of Ptolemy. He cites, in confirmation of his view, certain words of Haly Avenrodan, commentator on Ptolemy, concerning bright and dark degrees, which he (mistakenly) thinks are the words of Ptolemy rather than Avenrodan. That these are the words of the commentator, not the author, can be easily understood not only from the Greek manuscripts but also from the common translation. See what trust can be placed in those who make such claims about the heavens. They are drowsy and dim-sighted in reading their own authorities!

No one who followed Ptolemy used a ninth sphere, for more than a thousand years. Alfonso was the first to calculate the positions of the planets with reference to the ninth sphere. To him all the moderns have adhered, whereas the ancients used only the eighth sphere. Leo the Hebrew [Judah Leon Abravanel] and Proclus the Platonist, both excellent mathematicians, contend that the eighth sphere is the highest of all.

Departing from this view, more recent scholars, not entirely without reason, argue there is another sphere superior to the eighth. They base this on the idea that two motions in completely opposite directions cannot belong to the same body. Since it has been observed with certainty that the fixed stars move from west to east, and yet that the sphere itself, along with the others, revolves from east to west, they conclude that the first motion, completed in many thousands of years by a single revolution, belongs naturally to the sphere of the stars. The second motion, completed in the space of a single day, must, just as it applies to the wandering stars, be imparted to the eighth sphere by another. By a higher globe, which carries everything along with it from east to west, while the stars themselves move by their own proper motions from west to east.

This suspicion, though not born of nothing, is refuted in various ways by others.

There are those who deny that the stars move from west to east, although certainly keen-eyed men and mathematicians assert the diurnal motion belongs to the aether, which is one and not divided into spheres but continuous. All the stars, both fixed and wandering, are carried from setting to rising by their own motions.

Leo the Hebrew attributes this motion to a lower sphere rather than a higher one. Others, considering the entire heavens a kind of living being with the spheres as its members, claim there is one motion imparted to the whole heavens by a certain universal mover. Other motions belong to the individual spheres according to their differences, and are assigned to them by their own distinct movers.

Therefore, the motion we call diurnal, common to all the spheres, does not belong to the eighth sphere (or any other in particular) more than the rest, but arises from a certain universal mover of the entire heavens. It is thus unnecessary to conceive of another sphere to which this motion would properly belong. It is also unnecessary to conclude the same sphere has two proper motions, since one derives from the common motion shared with the rest of the heavens. The other arises from its own nature and is not imparted by the same mover.

Setting forth these things for consideration, we affirm only this: nothing indubitable and certain can be stated concerning them. The discussion returns to probable and interpretative arguments, which, being numerous on both sides, ultimately leave us in doubt.

If we grant the existence of the ninth sphere, we must also assent to those who conceive a tenth above the ninth, since the reasoning for both doctrines is nearly the same.

Those who defend their position obstinately, and assert that more than one motion cannot naturally belong to a single sphere… they introduce the ninth because they observe that the eighth sphere is moved by two motions. Likewise, those who perceive a third motion, led by the same reasoning, introduce a tenth.

This was believed by Alfonso, Campanus of Novara, Leopold of Austria, and Mashallah. Mashallah falsely attributes this opinion to Ptolemy, as does Albertus Magnus who followed him.

Chapter Two

If another sphere exists above the eighth, the old astrology is false. If there is none, the new astrology is false. Even if it exists, it is altogether necessary that the ninth collapses.

Given the diversity of opinions, it is easy to perceive how uncertain this renders divinatory astrology.

If there are two spheres above the eighth, all astrology of the ancients is false. Being ignorant of the most powerful parts of the heavens, they relied on useless and imperfect observations, because those spheres cannot be ineffective, and instead surpass the rest in supreme rapidity of motion, in the loftiness of their position and the vastness of their mass.

If, on the other hand, there is no sphere beyond the eighth, none of the moderns' astrology is valid. It describes twelve signs in the ninth sphere, which does not exist. What authority can such astrology have in determining fate?

Yet whether the ninth sphere exists or not, all astrology of our age is known to waver, being subject to inconstancy, contradictions, and conflicts.

Let the astrologers answer me this. Do influences reach us from the entire heavens, or only from those parts that shine with conspicuous light?

If the first, then not only the planets but also the orbs that carry them must partake in the decree of fate – yet the astrologers do not observe these orbs at all, as if they believe them to have no power over the lower world.

If the second, only the Sun's power is present in those stars which shine with visible light. Therefore, no influxes from the ninth sphere can reach us, since it either does not exist or it possesses an invisible light. Such light would be neither distinguished by stellar rays nor any variety of luminescence, but instead entirely transparent – the watery or crystalline heaven – or else infused with a faint and rare light, as many suppose is also the case with the other celestial globes.

Therefore, either every sphere must be observed, or the ninth, if it exists, must be disregarded, as Bonatti believed when he asserted that nothing above the eighth sphere pertains to astrology. Yet in this ninth sphere, twelve signs are described. Signs holding the highest authority in the constellation of the year, both through their own powers and through their primary role in modifying the influences of the planets.

Wherever astrologers turn, they fall into inextricable snares. Either they omit spheres that should not be omitted, or by admitting one that is ineffective, they corrupt the truth of all constellations. But even if they were to extricate themselves from this, they would still be bound by an unavoidable constraint. If we concede to the ninth sphere as much fixed power and efficacy as astrologers wish, without raising further dispute about the other spheres, then all predictions of the moderns are still most certainly false.

For it cannot be denied that the power and properties of that ninth sphere differ from the influences of the eighth. And yet modern astrologers have handed down no different doctrines concerning the signs of the ninth than what the ancients handed down regarding the signs of the eighth. In this we see either great dullness or great deceit. Either they fail to see that different spheres cannot have the same nature, or, seeing this, they nonetheless wish to persuade others otherwise.

It appears probable they deliberately sought to deceive others. Once the ninth sphere was devised, if the influence of a different sphere were to be discussed, their profession

would necessarily have to cease for many ages, until at last, through numerous experiments, the nature of that sphere could be confirmed, something more ambitious and unscrupulous men could not tolerate. Therefore, astrologers transferred the divisions of the ninth sphere and named them with the same terms the ancients used for the divisions of the eighth, as if, along with the name, the very nature itself were also transferred. They then published exactly the same doctrines about these as the earlier writers had about the eighth.

Thus, modern astrologers describe Aries, Taurus, Gemini, Cancer, and the other signs in the ninth sphere. They claim these perform the same actions as the signs of the same names in the eighth sphere (those recorded by the ancients), and defend the entire fraud solely through association of names.

If astrologers do this knowingly, it is a disgrace; if they are deceived themselves, it is madness. It would be as if, by transferring the name of Jupiter to Saturn, they were to believe that Saturn had become Jupiter, and when they needed to make predictions about Saturn, they would instead declare those things the ancients had attributed to Jupiter.

The difference between the eighth and ninth spheres must certainly be considered no less than that between Jupiter and Saturn, if we estimate them by their motions and the quality of their light, by which celestial bodies are primarily distinguished.

The only difference between those two planets is that one is slower than the other, and the light of one is either darker or brighter than the light of the other. But how much greater is the difference between these two spheres, one of which, by its nature, moves with the slowest motion, while the other is carried with the most rapid motion of all! Yet the former shines and is conspicuous with its multitude of stars, while the latter, possessing either no light at all or an invisible one, does not fall under sight or vision.

Finally, if astrologers say that even the parts and minute divisions of the same sphere have vastly different efficacies, how can spheres of different natures have the same efficacy?

And if two spheres share the same nature, did God, the creator of nature, not make one of them in vain? And if they do not correspond in motion, in light, in position, or in mass, what common nature can they have? Let one look at the structure of the universe in all directions. A manifest diversity appears in all the spheres, of the elements or of the heavens.

If this ninth sphere does indeed exist, it must necessarily be of a different nature from the eighth. Thus, what Ptolemy and the earlier authorities taught about the signs and divisions of the eighth sphere cannot rightly be assigned to the signs of the ninth sphere. Yet all the moderns do precisely this, and consequently, even if they claim to practice a true art, their predictions can only happen to be correct by sheer chance.

Chapter Three

Images differ from the signs, although they correspond in name.

Whatever may be determined concerning the number of spheres, the twelve signs themselves, to which both ancients and moderns attribute so much that the whole sum and pivot of astrological prediction revolves around them, we will briefly demonstrate to be fictitious and non-existent. Furthermore, even if these signs were real, astrologers have nevertheless handed down false and contradictory doctrines concerning them, so that everything dependent on the signs (and all divinations depend on them) is entirely deceptive.

But first, it is necessary to warn the reader that the twelve signs are one thing, and the images another, although they correspond in number and name. I say, moreover, that images and signs are entirely different, even among those who through ignorance make the same division of the signs as the forms of the images. For the signs are established as fixed and immovable, intercepted by the equinoxes and solstices, so that the beginnings of Aries, as a sign, are always reckoned from the vernal equinox.

However, the image of Aries has its beginnings reckoned elsewhere and at a different time, just as the stars by which it is delineated are continually carried from setting to rising. In this matter, a great part of the astrologers err, believing that since they refer the planets to the eighth sphere, they must necessarily treat the signs as mobile.

They have not understood the words of Ptolemy in the first book of the *Apotelesmata*, which expressly states the contrary. These words in Latin are as follows:

"Let us not omit what is worthy of note, that it is reasonable to establish the beginnings of the *dodecathemoria* (that is, the twelve signs) and their boundaries or limits from the tropical and equinoctial points, as the foremost writers indicate. From what we have stated, the natures of signs, their powers, and their affinities derive their cause from the tropical and equinoctial principles, and not from any other. If we establish other principles, we must not use their natures in predictions or, if we do use them, we shall stray from the truth by altering the intervals of the zodiac whence their powers arise."

Thus speaks Ptolemy. His opinion had to be explained before it could be refuted, since it has been little understood by many astrologers.

Therefore, the first difference between images and signs is that the former move, while the latter do not. And if they are described in the eighth sphere, another difference is even more apparent: images have unequal magnitudes, whereas the signs are equal to one another. For each of the signs contains thirty parts, whereas some images extend over fewer and others over more degrees in space.

Since signs and images are distinct, we will refute each by its own proper arguments. And first, we will inquire concerning the signs: what reasoning has demonstrated twelve distinct natures among them, each with its own powers and properties, and that there are neither more nor fewer?

Abraham Ibn Ezra, at the beginning of *The Book of Reasons*, states: “Some things said about the signs are proven; others are based on arbitrary choice.” He immediately clarifies which are primarily arbitrary. He mentions the division of the zodiac, saying: “The division of the signs – why into three hundred and sixty parts? Because this number is more suitable for divisions.”

The same is also written by Haly Avenrodan in his exposition of Ptolemy’s *Apotelesmata*: “We have divided the circle into twelve parts, which are called signs, and each of these signs into thirty parts, which are called degrees, and each thirtieth part into sixty minutes, because these numbers are more suitable for division.”

With what should I refute astrologers more appropriately than with their own words? They are so ignorant of the nature of things that, because those who measure the motions of the stars divide the circle into twelve parts for the convenience of division, they believe these twelve parts possess different powers and properties. As if their distinction arose not from the arbitrary decision of mathematicians but from the nature of the heavens.

And it follows, if the signs are described in the eighth sphere, as Ptolemy, the Egyptians, and all the masters of the signs wished, no reality or solidity of nature corresponds to them. They can only be thought of and conceived in the mind.

Origen, being imbued with the doctrine of the Egyptians, called these signs intelligible and perceptible only by reason. There is no part of the eighth sphere in which either the equinox or the solstice always occurs. Or if, as astrologers suppose, this sphere is carried from setting to rising by its own motion, the points at which the equinox or the solstice supposedly always occur have no real existence. They depend solely on our own conception.

These points may serve mathematicians for discovering motions and calculating the positions of the planets, but they cannot serve as the origins of influences or as the principles

of any celestial powers. Perhaps the Chaldeans considered this, since in predictions they used only the images of the Sun and not the signs.

The great weakness and inconsistency of the astrological art is clear. Those things astrologers consider foundational were regarded as nothing by the Chaldeans, the foremost practitioners of this profession and most renowned in the prediction of future events.

Haly Avenrodan, observing this, says: "The signs are mansions that effect nothing; rather, it is the fixed stars within them that operate. Moreover, because the Sun traverses all the signs every year, they receive their names from the operations the Sun performs when positioned in them. Regarding the fixed stars in the same part of a sign – whether one hundred, as the ancients held, or seventy, as more recent scholars assert – if their influence remains, the power of that sign will be the same as that of the star located there, for the entire duration. But when that power is transferred to another part, the influence will likewise be transferred to that part."

Thus speaks Avenrodan. His opinion, from these statements and from elsewhere in his writings, is that the individual parts of the zodiac have no operative power, if the influence of the stars is excluded. However, when astrologers say this sign has one property and influence while another sign has a different one, this can be true in two ways. Either the stars gathered in that part of the sign are endowed with power, whereby the efficacy belongs to the guest rather than the lodging. Or when the Sun reaches that sign, it produces certain effects.

Thus, the equinoctial and solstitial signs, Aries, Cancer, Libra, and Capricorn, are called 'movable' because, when the Sun is positioned in them, it changes the season of the year. The signs adjacent are 'fixed,' since when the Sun moves through them at that time of year, the state and quality of the air does not change.

Ptolemy says Aries produces thunder and lightning not because of any power fixed in that part of the zodiac, but because when the Sun is in Aries, the vernal equinox occurs. Due

to its seasonal qualities, this causes atmospheric changes. The Sun's heat, coming closer to us, dissolves the moisture of the preceding winter. This raises many vapours, whence comes condensed clouds. When the clouds strike against each other in mutual collision, they emit flashes of lightning.

This opinion of Haly Avenrodan regarding the power of the signs proves what we intended. The parts of the zodiac intercepted by the equinoxes and solstices, in which Ptolemy asserts the principal force to reside, and which all astrologers except the Chaldeans use, have no operative power.

While Avenrodan seeks to expound and clarify Ptolemy's opinion, he erases it entirely. He immerses his pen in the void of truth, and, even against his will, obliterates Ptolemy completely. For he asserts that the parts of the circle effect nothing. What is thought to be produced by them is actually caused by the action of the Sun or the stars operating in those parts.

However, the Egyptians, Ptolemy, and the entire crowd of astrologers, attribute to the signs perpetual and immutable properties, which do not vanish or change even when the Sun and stars depart. Otherwise, Ptolemy ought to have given a different account of the nature of the signs than what was handed down by the Egyptians. Later writers should have presented different accounts from those of Ptolemy, if the power of the signs changed along with the migration of the stars.

Yet, they have transmitted the same teachings about the nature of the signs as those who wrote before them, even as found in Petosiris and Nechepso. It then follows that the properties once attributed to Aries should at some point belong to Taurus. Those of Scorpio should eventually become those of Sagittarius, and so on for the rest. The stars that once moved through Aries now pass into Taurus. Those that once occupied Scorpio have, with the passage of time, migrated into Sagittarius.

As for what is said about the Sun – good God, how vain and nonsensical! – the astrologers write as if power were attributed to the sign, rather than the Sun when placed therein. As if a chair breathes forth the power of disputation because a philosopher is accustomed to debate while sitting in it. Or expecting syllogisms from a footstool because someone seated upon it engages in reasoning.

Just as the Sun, when positioned in Aries, causes thunder and turns the frost of winter into the mildness of spring, so do astrologers declare that, when the Moon is in Aries, thunder is to be expected, and that in all matters Aries is the source of nobility. They do not notice that if thunder occurs when the Sun is positioned in Aries, the same does not follow for the Moon. Nor does it follow for the other planets, since thunder does not happen due to the nature of the sign. It happens because of the Sun's heat, which lifts vaporous exhalations into the heights, forming the material of clouds, whence thunder and other such phenomena later arise. Since the heat of the other stars does not possess the power of the Sun, they do not produce what the Sun produces, even if positioned in the same sign.

That the Sun causes this effect more in Aries than in Aquarius is not due to the properties of the signs but to the position of the place. In Aries, the Sun is closer to us, and thus we are more affected by its rays at that time. While positioned in the same sign, the Sun produces different effects in different regions.

But astrologers do not know even the first rudiments of dialectic, which teach us to distinguish what is essential from what is accidental. Alas, if only these people were merely ignorant of dialectic and not outright raving like demented children!

For this is madness rather than mere error. To think that because, when the Sun is in Aries (not to stray from the same example), the season of the year changes, so whatever is begun while the Moon is in the same sign will not be stable or firm, but fleeting and mutable. To think that because, when the Sun occupies Leo in the middle of summer, the quality of the

air does not change but remains the same, so Leo is a fixed sign, and so whatever is undertaken under its influence will be enduring and unshaken.

From this arises astrologers' remarkable doctrine that, when the Moon traverses Leo, one ought neither to don new clothes nor cut them, lest, due to the quality of a fixed sign, those clothes should last an unusually long time. By this reasoning, one might suspect the signifying of illness or some other misfortune, for which reason the clothes cannot be worn at all – since worn clothes cannot remain undiminished or endure indefinitely. Who, upon hearing such claims, could fail to think them inventions crafted for laughter by storytellers? How could such people ever be freed from their errors – those who consider such ideas as not absurd, but true?

When disputing with those who feel no shame and resist even the most evident principles, philosophers often force them into self-refutation, to the point where they contradict rather than prove their own assertions. Let us therefore approach these people in the same way.

Since astrologers do not find it absurd that Aries has the power to make things changeable, merely because the Sun's entrance into it alters the season of the year, let us at least extract from them one concession. They should not, as if born under Aries, shift their position. They should hold to their doctrine and defend it. If so, we will put this question:

Are the signs they call movable, fixed, and themselves immovable? Or do they move along with their images?

If the signs are movable, they too are moved. But initiating summer, autumn, winter, and spring is not the property of movable signs, but of immovable ones. The properties astrologers ascribe to the signs, movable or fixed, are derived from the aforementioned variation of seasons. Therefore, these properties do not belong to any other signs than those thought immovable in the circle at the aforementioned positions.

But if the signs are immovable, they do not correspond with the position of the images, which, along with their stars, repeatedly change location. Then how can properties derived solely from the shape of the images be attributed to other signs as well?

Astrologers call Aries movable, equinoctial, and of short duration, conditions that belong to an immovable sign. At the same time, they call it a quadruped, weak-eyed, and lustful, which are not attributes of the sign but of the image, though they share the same name while differing in nature, position, and properties.

So I do not go through each point one by one, the entire crowd of astrologers, when they classify the signs – some as common, some as fixed, some as movable – further divide them into straight and oblique. These are not conditions of movable signs. Likewise, astrologers use other distinctions. Some signs are human, others bestial, some aquatic, others terrestrial, some mute, others vocal, some barren, others fertile. All this belongs to the images, not the signs, because these distinctions do not follow any position in the circle but instead follow the nature, shape, and figure of the image.

What, then, is this great sluggishness or sleepiness, that astrologers mix and confuse different things, deceived only by the similarity of names rather than by their nature?

The classification of one sign as hot, another as earthy, another as airy, and another as watery is also derived from the images and has been rashly transferred to the signs. If the state of the zodiac is considered from its immovable points, Aries should be airy (hot and humid) rather than fiery (hot and dry), since spring opens with it, a season of hot and humid quality.

When explaining why, in a circle with no beginning, we are accustomed to take the start of the year from Aries, Ptolemy responds that in the first age of all things, moisture abounded. This is the quality of spring, and that is why we begin with Aries.

Indeed, O Ptolemy. If Aries is the first sign, and moisture belongs to the first age, do you think it a dry sign or a moist one? If dry, it is not the first. If moist, why do you call it fiery?

Finally: the distinctions of cold, dry, hot, and humid, as assigned to the signs, seem to derive from the nature of the images, rather than the signs themselves. Even Ibn Ezra admits this in *The Book of Reasons*.

They classify Cancer, Scorpio, and Pisces as cold, considering the nature of the animals whose names they bear; Aries, Leo, and Sagittarius as hot, by the same reasoning; Gemini and Aquarius as airy, due to their human shape, since that quality predominates most in humans; and Taurus, Capricorn, and Virgo as earthy – Virgo due to the power of its sex and because of the ear of grain it holds in its hand.

Having derived this influence from the diverse properties of the images, astrologers attribute it to the signs. In this matter, good Ptolemy not only nods but even gorges himself. Within the same passage he shifts from sign to image, which I will plainly demonstrate. The sauce upon the meat is the incurable confusion of Haly Avenrodan in explaining Ptolemy's words.

Ptolemy's words in the second book of the *Apotelesmata*:

"The *dodecatemorion* of Aries (thus he calls the signs) is universally thundering and hail-bringing."

However, these effects occur more or less depending on the nature and property of the stars within the sign. Ptolemy adds: "The earlier part of Aries causes rains and winds, the middle brings temperate air, and the latter produces heat and pestilence. Those parts that bend towards the north bring heat and corruption, while those that incline towards the south are icy and cold."

I take these words of Ptolemy in such a way that, when he pronounces universally about Aries, he refers to an immobile sign. This cannot be denied, since it is the very sign in which the equinox occurs. Ptolemy, for this reason, refers to Aries the way he does, because it tends to stir up things before the vernal season. He subsequently adds remarks about varying effects according to the nature of the stars existing therein.

Haly Avenrodan believes these distinctions also apply to the parts of the day, but it will become clearer than daylight that Ptolemy was speaking about the image. Just as Ptolemy errs in establishing his doctrine, so too Avenrodan errs in interpreting Ptolemy.

Avenrodan believes Ptolemy's words should be understood so that the stars, which he says are in those parts, were in those parts of the sign at the time he was writing. Furthermore, the property of that sign at that moment was determined by those stars. With the stars shifting to another place over time, those properties would transfer elsewhere.

This interpretation of Avenrodan might seem plausible if Ptolemy had done with regards to Aries what he did not do with other signs. That is, if he had not named any of the stars he positioned in those parts. But since, in explaining Taurus, he names certain stars explicitly, he simultaneously exposes his own error and that of his interpreter. Those stars, at the time of Ptolemy, were not in that part of the sign, but rather in the part of the image where they were, are, and will be.

Ptolemy's words concerning Taurus: "The sign of Taurus, universally speaking, brings both qualities of the air; however, it inclines towards warmth. Its preceding parts, especially where the Pleiades are, stir up earthquakes, winds, and clouds. The following parts, where the Hyades are, produce lightning and thunderbolts."

Who does not see Ptolemy speaks about the image? In the preceding parts are the Pleiades, which our people call the *Vergiliae*. In the following parts are the Hyades, for which *Aldebaran* is read in the common translation. The Hyades are in the forehead, the horns, and

the entire head. The Pleiades are between the end of its body and the tail of Aries, this place being called the point of separation. However, since Taurus sets and rises with its back turned, the latter occupy the following parts and the former the preceding ones.

But if these statements refer to the signs, they would be entirely false. In Ptolemy's time, the Pleiades were not in the sign of Taurus, but in Aries. This can be recognised from his *Almagest*, which is readily accessible. Had Haly Avenrodan read this properly, he would not have doubted that both works have the same author.

I marvel at how Avenrodan errs so obviously in a matter so clear. He interprets Ptolemy's words according to the positions of the stars within the signs, and lets it textually stand that the Pleiades were, at that time, in the first parts of Taurus.

This error was adopted not only by Haly Avenrodan, but also by Leopold of Austria, and John of Eschenden in their so-called English Summa, and by later astrologers such as Bonatti. But the greater error of such writers is not merely that they follow Avenrodan. It is that they simultaneously maintain that these stars have not changed. They repeat exactly what Ptolemy says, even though, since his time, these stars have shifted by more than twenty degrees.

It is therefore evident that astrologers contradict themselves thoughtlessly. They confuse and intermingle the properties of signs and images, if indeed such properties exist, without distinguishing them according to position, nature, or parts.

Chapter Four: Omitted due to numbering error in manuscript.

Chapter Five

The images of the Chaldeans are mere fabrications. What led the Chaldeans to invent them. That the error of artificial images and many others have sprung from this source.

But do the signs have power? Are the images themselves something? Perhaps astrologers seem less mad here, neither relying on fictitious or arbitrary things. Who would deny that images, each having its own lights, stars, and rays, have great power according to the nature of the stars?

But astrologers peddle nonsense here too. Even though the stars whence the images are fashioned are real and natural, the very constitution of the images is neither true nor natural. It is false and entirely imaginary, fabricated according to the whim of their creators, and without any appearance of probability.

If one star has great power, should not many stars conspiring together in one place have even greater power? But reason sees nothing there, except a fiction of ours regarding the conspiracy of the stars. There is no mixture through actual coalescence. How do many stars unite into a single property, being distinct in nature and separated by the vast immensity of distance?

I know what astrologers will reply. That those stars come together into the likeness of a single image, which serves as evidence of some hidden affinity. Just as a certain figure is delineated from one species, so from all those stars together arises a single natural property of the same thing.

This might be something – although insufficient to achieve their purposes – if images appeared absolutely and with the most genuine markings.

However, images are fashioned according to our whim (as I shall demonstrate). There are no more dogs and hares (as astrologers claim) than there are ostriches and elephants. Each may fashion for himself whatever form he pleases.

Therefore, any argument drawn here is vain, arbitrary, and fictitious, after the manner of other astrological arguments.

If astrologers contend that those figures exist not by the whim of the observers but through nature itself, I will not so much appeal to the credibility of experience as to the reasoning and testimony of the astrologers themselves.

Abraham Ibn Ezra, a man of great authority among this profession, in the second edition of *On Astrological Principles* (for he wrote two books on the same subject) gives an account of images. We translate into Latin:

"Ptolemy calls the Lyre the Falling Vulture. Nor is it surprising, since just as anyone can change a figure for himself, so too can one change its name; for the heavens are spherical, and there is no reason to establish the beginning of anything in one place rather than another. Just as one set of stars is joined to another according to the judgement of the eyes, so too different images are formed. Thus, we will describe them in the way they have been handed down."

These are the words of Ibn Ezra.

He cannot have confirmed my opinion more truly and effectively. If there is neither a beginning nor an end to the parts of a circle, you may begin an image for yourself from whatever star you prefer and end it wherever you wish. Depending on the differences in the starting and ending points, and on the number of stars you include or exclude, you will construct different images. Different people derive different forms from these same stars, as Ibn Ezra shows in the case of the Vulture and the Lyre. One can similarly demonstrate other instances.

Nor is there agreement on the number of the more common images of the zodiac. Some make them twelve, but the Chaldeans reduced them to eleven, combining Libra and Scorpio into one. What prevents this, when within the canvas of this celestial painting equal power has been granted to depict anything and everything? Even Albumasar, who claims to justify all the doctrines of astrology, provides no other explanation for the images than that

Aratus described them thus. As if Aratus himself were not the greatest fabulist of all – one who, as Cicero says, wrote about astrology while being completely ignorant of astrology.

If you compare Aratus' sphere with the Barbarian sphere, you will often see them differing and disagreeing. Clearly, these images have been invented at will and rely on no solid foundation of doctrine or reason.

Just as astrologers arbitrarily derive their images, so the masters of the Hebrews claim to find their own alphabet in the stars – that is, the letters and elements of their language. If they were to find a credulous audience, they could no less plausibly persuade them of this than astrologers persuade others about their images.

What need is there for more examples? If all forms and figures dwell within the sky, no forms and figures dwell within the sky. All such things exist by the power and will of men. By the action of nature and Truth, none exist at all.

If these little diviners of ours had fashioned images of certain august and lofty things, I might have been more easily persuaded that these are the works of God. But when I consider His counsel and wisdom, I do not see why the temple of divinity, those courts of Heaven, could not be adorned with better images than irrational animals, monsters, or lifeless things.

What, indeed, is there except bears, dragons, hares, dogs, and inanimate objects such as arrows, ships, and triangles? Even severed heads, oozing with rot and filth? A maiden condemned to punishment? To say nothing of the hydra and centaur. If nature does not allow such things, why has it drawn their likenesses in the heavens?

I consider it greater than any madness to believe these were established by nature and formed by divine counsel. A good priest or great king would be ashamed not to have better paintings in a temple or a palace.

Else, what was the intention of nature here? Was it so that, through these upper images, it might govern lower bodies of the same kind? That, through the celestial Lyre, it might breathe musical melody into whatever men it wished? That, through the depicted animals (though among us they are born and perish daily), it might generate and preserve them?

Then why do monsters exist in the heavens that have no existence in nature? Why are there not countless natural animals depicted?

Why is it the privilege of dogs and bears that they should have two rulers or overseers in the heavens, while elephants, tigers, and countless other species of animals have no governing divine power?

But enough has been said about these things. Not only is it disgraceful for a philosopher to believe such nonsense, it is unworthy to even discuss it.

If someone were to ask me why, in this licence of invention, the supporters of astrology choose these images rather than others, I would answer that the question assumes reason where reason is sought in vain. These things have been established by no reason at all. Yet it is easy to see what led astrologers into this folly.

I believe the images assigned to the parts of the zodiac derive from the works of the Sun, as performed when it is found in those parts. The Cancer section of the zodiac is called Cancer because the Sun, like a crab, moves backwards there. The next part is called Leo because of the dominance of the excessive heat. Another section is called Taurus because, when the Sun reaches it, the earth is ploughed by oxen. Gemini follows, since at that time all things double by doubling. Under Virgo, the earth is scorched by the Sun's burning heat, and bears nothing. Under Aries, the fields are clothed with the fleece of flowers, and for this reason, astrologers assign the animal whose head resembles a tuft of hair. Libra makes nights and days equal, as if weighed in a balance. When the Sun reaches Scorpio, the air first begins

to sting with cold. Under Sagittarius, the sharpness of severe cold and winds torments us. In Capricorn, the Sun begins to ascend again like a goat. In Aquarius and Pisces, it abundantly pours out rain for the fish.

Led by such similarities, astrologers may have formed these images, shaping the stars into the likeness of the nature they wished to assign. Added too are the fictions of poets, either for pleasure or for the favour of those who invent such things, just as Conon, the Egyptian mathematician, first saw monsters and, from Berenice's crown, a lock of hair.

But I do not bother to scrutinise more diligently the madness of others. It is sufficiently evident to the non-delusional that these are not the works of nature, but trifles of invention, the fantasies of dreamers. I may rightly define these fabrications: they have arisen from corrupt philosophy and the fables of poets. Yet astrologers attribute so much to them, as if they were the truest things, formed by the very finger of God. It is scarcely credible to what superstitions this madness has led.

"Do not take a medicine," they say, "when the Moon is in Taurus, because that animal chews the cud, and therefore the medicine will cause vomiting." "When you build a house, beware lest Scorpio holds the fourth place, because many scorpions will abound in that house." "One born under the rising of the Crown will be a king, one under the Lyre will be a musician," and a thousand other things of this sort.

Astrologers are convinced the true forms and natures of all these things exist in the heavens, whence marvellous powers flow down to us for determining fate. The superstition of fabricating images has grown entirely out of this madness, so astrologers believe an image formed in metal, bearing a similar likeness, is infused with power from that celestial entity. But those things are not in the heavens. Nor, if they were, would they descend to Earth because of an image sculpted in their likeness. Even if they did descend, it would still be of

no benefit to us, as Averroes proves against Al-Ghazali. But we shall discuss these matters more fully in a separate treatise.

Chapter Six

Invisible images are neither known by sense nor by reason. Their authors, who were not Chaldeans nor Indians but only Arabs, contradict one another.

One might marvel at the madness of the astrologers in fabricating these most fabulous images. But they have dreamt up others far more ridiculous. For they assert that in each *decan* or *face* of any sign there are certain images, invisible, but possessing the solidity of the truest nature. At this, one cannot help but burst into laughter.

For they are of this sort: In the first face of Cancer, astrologers say, there rises a handsome young man, well-clothed, but with some obliquity in his face and fingers. The rest of his body resembles a horse and an elephant, with white feet, with various crops and tree leaves suspended above. In the first face of Leo, there rises a tree with the deepest roots, on whose branches a dog sits, and a man clothed in noble yet dirty garments, weeping and sorrowful over his parents. Similar things are described in the other *decans* of the signs.

They are mentioned as most efficacious by Albumasar in the sixth book of *The Great Introduction.* Ibn Ezra mentions them in the book *The Beginning of Wisdom.* Pietro d'Abano, Michael Scot, and many Arab and Latin astrologers also mention such images.

When I learned of these matters, I thought they used these images to indicate what each *decan* of a sign accomplished, not that they meant such figures literally existed in the heavens. But upon reading their books, I recognised it otherwise, for these writers believe, assert, and insist, that images truly exist in the *decans* and are the causes of marvellous works among us.

Indeed, says Albumasar. Images sometimes produce things similar to their forms, but also entirely different ones. If lynxes had established this doctrine, I might be led to doubt, believing their eyes perceive what escapes our sight. But when men proclaim such wondrous mysteries, I find no credibility. What could support their claims? They have no eyes other than those common to humans. Humans do not see such things. Nor do we read that these writers were caught up into heaven like the St Paul the Apostle. Nor could any reasoning from their earthly position demonstrate their conclusions.

Let those who call themselves philosophers be ashamed. They are not even embarrassed to write such nonsense, which scarcely has the persuasive power of a crone babbling to a two-year-old infant. Furthermore, they do not all invent the same images, but each devise different ones for themselves.

One writer says that in the first face of Aries, a woman rises, shining brightly, with the tail of a sea fish. Another says there is no beautiful woman there, nor a fish, but an Ethiopian. About this Ethiopian's eyes, there is doubt – whether they are black or red – but he is certainly of tall stature and wears a white cloak.

In the third face of Gemini, some say, there arises a golden flute, a barking dog, and a dolphin. Others contend there are none of these, but rather a man arming himself with weapons. He is equipped with a shield and furnished with a quiver.

In the third face of Scorpio, the Arabs claim there is a horse and a hare. The Indians say there is neither horse nor hare, but rather a dog, a boar, and a leopard. Others claim there are no beasts at all, but rather a man bent on his knees. To interpret mysteries, perhaps this man prays to God on behalf of the astrologers, that He may restore their sanity and free them from madness.

For what else is this, if not madness? Who could believe in, and assent to, utterly false and impossible trifles such as these?

Seeing this, Abraham the Jew, in his book *On Nativities*, acknowledges the ridiculous nature of these invisible images. I find no one, except for the Arabs (always the most given to fables), and the Latins who followed them, to have placed faith in such invention.

Nothing of this is found among the Egyptians, nothing among the Chaldeans, nothing among the Greeks, and nothing among the ancient Latin writers on astrology. As to what Albumasar says – that the Indians, Egyptians, and Babylonians transmitted these things – he is easily shown to be false.

Concerning the Egyptians and Chaldeans, we have evidence that such nonsense did not exist among them, whence it can be inferred that Albumasar is likewise lying about the Indians. However, this cannot be refuted as clearly as in the case of the Egyptians and Chaldeans, since no records of the Indians have been transmitted to us by trustworthy authors.

Alas, this is a peculiar quality of the Arabs. Whatever inventions they fabricate, they assign to illustrious authors – many of whom we mentioned in the first book of these disputations.

But certain writings of Petosiris, a master of astrology, still exist among the Egyptians. Besides Maternus, there are Hephaestion, the Theban commentator, and Paul of Alexandria, all interpreters of astrology. It is therefore easily recognised that no mention of these invisible images exists in Egypt.

The same is evident concerning the Chaldeans, from the testimony of Teniro the Babylonian, who wrote on the effects of the *decans* and the images rising with them. We also see the testimony of Porphyry, who wrote *Astrological Institutions* according to the Chaldean doctrine. And then there is Manilius and Maternus.

Only those who read no Greek can doubt the Greek authors here. Nowhere in any Greek writer is there mention of these invisible images, and we must vehemently reprimand

Haly Avenrodan, who attributes this error to Ptolemy. In the ninety-fifth word of the book titled *Fructus*, Ptolemy refers to "those things which rise together with the decans of the signs, and indicate the will of the one born and what kind of skill he will pursue." The commentator Avenrodan believes 'those rising together,' means the invisible images of which we have spoken, not knowing the nature of what the Greeks call *συνανατέλλοντα*, that is, 'rising together.'

The Greeks use this name for the six and the thirty images outside the zodiac, of which twenty-one incline to the south and nine to the north. Concerning their properties and nature Ptolemy writes in the first book of *Apotelesmata*. However, neither there nor anywhere else does Ptolemy mention other images, except those formed from visible stars, against which we argued in the previous chapter. Moreover, Ptolemy uses the same expression when he says that in the eclipses of the luminaries, the *συνανατέλλοντα*, that is, the co-rising bodies, must be considered. He discusses the same idea in the second book of *Apotelesmata*, thereby indicating from what he means by co-rising.

When Ptolemy says inclination and profession are indicated, he teaches the doctrine of Manilius, Maternus, and the Greek writers. That one who is born with the Argo Navis rising will become a sailor, one with the Lyre a musician, one with the Charioteer a charioteer. Et cetera. Moreover, Porphyry, in the *Isagoges*, says the figure and form of *τῶν ζῳδίων*, that is, of the animals which are in the zodiac and are *συνανατελλόντων* (co-rising), consists of the composition of the stars. From this, we understand that these things called co-rising are nothing other than images composed of stars. In explaining this, I have been somewhat lengthy, because I hear George of Trebizond (a Greek, though his book has not reached us – but this is what I have heard) in his commentaries on Ptolemy's *Centiloquium*, follows the explanation of Haly Avenrodan. The barbarian Albumasar could have diverted him from this error. He affirms, according to the opinion of Ptolemy, that no images arise

from the *decans* other than those visible and composed of stars, positioned to the south and north.

I wish to recall to mind what we said in the fifth book against those who claim the Lord Jesus was born when the first face of Virgo was rising, in which a Virgin is depicted nursing a child. This image of the Virgin nursing a child belongs to those fabulous inventions we have mocked. However, no such image appears there, but rather another, as Albumasar narrates, which the Indians intermingled. An invention both vain and ridiculous, as anyone who carefully considers it will realise.

How shameful to wish to confirm the truth of the Gospels via such astrological ravings. It is demonic nonsense arranged for no other reason than that astrological pestilence might be received as a friend and supporter of religion. Let such writers keep their nonsense to themselves. Such fictions do not confirm Christian truth, but rather weaken and corrupt it.

Here ends the eighth book of Giovanni Pico della Mirandola's Disputations Against Divinatory Astrology.

Disputations Against Divinatory Astrology

By Giovanni Pico della Mirandola, Count of Concordia

Book Nine

Chapter One

Summary of those things which have been completed. What must be done in the following books, and how it must begin.

Thus far, we have demonstrated that astrology is nothing. Those things about which astrologers make predictions do not depend on the heavens, except by accident or else from a remote and universal cause – neither of which produces particular knowledge of events. We have further shown that even if the heavens caused these things, they would not happen in the way astrologers suppose, that is, from a certain initial moment. And even if events happened the way astrologers suppose, they would still not arise from the causes astrologers use in prediction, of which not one, if we were to conduct a thorough examination, is true and natural.

For although they use stars and planets, astrologers increase, diminish, and alter them according to places, signs, intervals, and other such inventions. We have demonstrated this to be false and ineffective. Therefore, astrologers introduce false causes, that is, fictitious ones, or else they corrupt true causes by mixing them with false ones.

Now we shall show that even if all these causes were valid, they would still be of such a nature that events could not be known by astrologers, or if they could be known, that such knowledge has not yet been attained.

Three things are necessary for true knowledge, if future events are to be predicted accurately through astrology. First, the initial hour of each event must be faithfully recorded. Second, the state of the heavens and the position of the stars at that hour must be precisely understood. Finally, the significance of that celestial and stellar position must be comprehended through true reasoning or reliable observations.

We will show in the next two books that none of these things can be known, or that if someone did know them, such a person has never yet existed. We will begin with the initial hour, whose knowledge is of primary necessity, since nothing can be properly established if there is any doubt or error concerning it. This applies to the birth of individuals, to the founding of cities and kingdoms, or to annual constellations.

Let us begin with nativities.

Chapter Two

That an astrologer cannot always know the exact hour of a nativity. Nor can he ascertain it through a true rule.

The moment at which someone is born cannot be ascertained by an astrologer unless, perhaps, he is equipped with an astrolabe and measures the heavens as the infant emerges. But this happens very rarely. Nor can it always be done at our will, such as at night, in cloudy weather, or when no mathematician is present. Even when it is done, it is very easy to err, as Avenrodan attests in his commentaries on Ptolemy. If the instrument is not absolutely precise (such precision has perhaps never existed), so observation corresponds to the moment of emergence, the calculation of the horoscope will stray.

But even if the true hour is investigated by means of an astrolabe, as we have said, this rarely happens. More frequently, indeed almost always, the parents or master of the

nativity tell the astrologer the believed hour of birth. Even astrologers do not deny this is unreliable, or often deceptive. Thus, it is called by them the ‘estimated’ or ‘suspected’ hour. There is suspicion but no certainty. Sundials are misleading, and even if clocks do not err, they still do not indicate the intervals that fall within intermediate hours.

Moreover, the common reckoning of hours does not take its starting point from the setting of the Sun, as mathematical reasoning requires, but rather from when the sky begins to darken. This happens when the Sun has already long since set below the horizon, especially when positioned in oblique signs (since they linger in the west, these signs sometimes cause the night to take an hour longer before the air darkens).

The astrologers acknowledge this along with us, but have devised a remedy so divination is not thereby put in jeopardy. For even if the estimated hour is false, unless it greatly deviates from the truth, they claim a method for discovering the true hour, and therefore the previous uncertainty is of no consequence. If astrologers had wisdom, we would object only that no art or science exists by which some particular thing may be known regardless of whether or not an event happens. There is no method by which we might ascertain the moment John or Paul was brought forth into the light.

But these things do not seem absurd to astrologers. Perhaps not even the fact that in any given day, much less in an hour, there are many small portions of time in which no one can be born in a given region, according to their doctrine – something most easily demonstrated.

If I am said by my parents to have been born at the first hour of the night, and the astrologer’s method denies this, I will ask why I was born earlier or later. Could not another person have been born under the same celestial inclination at the first hour of the night? If the astrologers deny this, there are many portions of any given hour in which, in certain places, a

person cannot be born. Few times given for a nativity by astrologers align with their rules. They always alter it to an earlier or a later portion of the hour.

If astrologers grant that another could have been born in that place at that time, although I was not born then, let Antonio be born at the first hour of the night. And I ask: if Antonio presents to the astrologer the hour of his birth, now determined to be true, will the astrologer judge it true or false?

If true, by the same reasoning, the astrologer ought to have judged mine as true, since his method is no more consistent. If false, a falsehood has been established, for that hour was determined to be the true one for Antonio's birth.

Therefore, the doctrine by which an accurate hour is considered false is itself false.

Furthermore, the astrologers say the sign indicated by the estimated hour should not change. The method should determine which part of the sign, especially in the Ascendant, is most significant. However, the estimated hour often lies about the sign, particularly when a person is born with either the last or first parts of a sign ascending. In such cases, the method does not correct the error but confirms it.

From these arguments, it is clear there is no reliable way to determine the horoscope when the hour is uncertain. Even if some method could be devised (as proposed by the astrologers), it is most evidently false.

Chapter Three

The doctrine of Ptolemy called almuseli or animodar, is refuted both by authorities and by reason.

In the third book of the *Apotelesmata*, Ptolemy hands down the following doctrine. Let the New Moon or Full Moon immediately preceding a nativity be observed. Then, the

planet that was in conjunction or opposition, having greater authority. Finally, with the chart now established, the planet that was the ruler of the relevant angle is assigned that position according to the number of degrees it occupied in the parts of the sign.

Astrologers fabricate this cardinal point as the foundation of the entire nativity; all astrologers decree this as the basis of the entire *apotelesmatic* practice. This is the decree they call *Almuseli*, or sometimes *Animodar*.

Modern astrologers err greatly, misunderstanding Ptolemy's opinion. Now, Ptolemy himself is opposed here by a great weight of authorities. Abraham Ibn Ezra says he has observed many nativities with the most precise astrolabes, in regions whose longitude and latitude were known and verified, yet never found any planet whose degrees and minutes in the signs corresponded exactly to the degrees and minutes of the Ascendant or Mid-heaven. Nor did the variation exceed half an hour from the most truly discovered hour of birth.

Some say Ibn Ezra wrote these things without judgement. As if he had some quarrel with Ptolemy about a kingdom, when Ibn Ezra lived nine hundred years later. Or as if Ptolemy, in establishing his astrological doctrine, did not himself prefer the opinions of others. Truly laughable.

Alchabitius, in his own commentary, writes that by no means can the true rising degree be found through this method. Henry Bate, a disciple of Albertus Magnus, when examining his own nativity (concealing his name and calling himself 'servant of God') says, "Let us discard Ptolemy's *Animodar*, which has been rejected by the wise."

Others do not reject the doctrine entirely but correct it, like Aoniar, who differs somewhat from Ptolemy. Others dispute over its interpretation. And when the question is to which place the planet is closest, some believe a discrete quantity should be observed. Others, like Antonius of Montolmo, argue for a continuous one.

But, leaving aside the authorities opposing Ptolemy, I demonstrate the falsity of this doctrine thus. Let Lucius be born in Rome and Fabius in Florence at the same hour and the same moment. It is clear to astrologers that their horoscopes will not be the same, due to the different inclinations of the heavens under which the men are born. And yet, if we apply Ptolemy's method, we will construct identical horoscopes for both, since in both locations the preceding Full Moon or New Moon would have occurred in the same part of the sky. Consequently, the same ruling planet will hold the same degree in the chart for both, defining the cardines of both nativities with identical numbers.

This is refuted by the obviousness of the matter and by sensory experience. Therefore, the doctrine is false. I am astonished that Ptolemy, the greatest of mathematicians, did not perceive his error.

Chapter Four

The investigation of the partile horoscope through conception, falsely attributed to Ptolemy by the Arabs, is irrational and has been rejected by many astrologers.

Among later astrologers, another method of investigating the horoscope from the hour of conception has been invented, to which writers attribute great importance. It is as follows: they assume as if it were a given, based on the tradition of the ancients, especially on the first and fiftieth proposition of Ptolemy's *Centiloquium*, that the position of the Moon at birth was the horoscope at conception. Conversely, they claim the position of the Moon at conception is the horoscope of birth.

On this basis, they propose a method to determine the position of the Moon at the moment the male seed filled the womb. Once this is found, they deduce a similar degree rises at the hour of birth.

The source of their error is a faulty translation of Ptolemy's books, for nowhere does he write about this degree, but only about the sign. His words, in the aforementioned passage, when translated literally into Latin: *Where it is at the time of birth, that sign is found to be the horoscope of conception.* Thus, in the *Apotelesmata*, where Ptolemy discusses this matter, he makes no mention of this supposed method. If he meant the degree, a view we have shown to be false, he would consider it very easy to determine the hour of conception – something later astrologers, using the method they claim to be Ptolemy's, provide without much effort to anyone who desires it.

So why does Ptolemy himself, in the third book of the *Apotelesmata*, say the seminal beginning is generally, or for the most part, unknown? And when it is known, it is by chance, fortuitously, or by observation? Certainly, he ought to have added 'by artifice,' if he had believed this could be discovered by any skill or method.

How does he say it is known by chance or observation? The Greek commentator claims it is known by chance when a woman perceives the sensation of received semen, as Cleopatra teaches. It is known by observation if the man, having deliberately noted the time of intercourse, afterwards abstains from further intercourse with the woman, so the months later reveal which instance of intercourse was fertile.

Beyond this, none of the ancients recorded another way of precisely determining the time of conception, much less attempted to investigate the hour of birth from it. When the Arabs say "Hermes Trismegistus prescribed this," they fabricate, like in the many other things they falsely attribute to that author. We noted this in the first book.

What the Egyptians actually handed down on this matter is reported by Hephaestion and Porphyry. They state the very rule found in Ptolemy was actually invented by the Egyptian Petosiris. Petosiris says the sign containing the Moon at the time of conception is

the horoscope at birth, or its opposite; the sign the Moon occupied at the time of birth was the horoscope of conception.

In the same place, Porphyry relates two additional methods, from the opinion of Antiochus and certain others, for investigating the sign that contained the Moon at the hour of intercourse. No mention is ever made of the degree. Indeed, the relevant chapter is titled: *On the Seminal Sign of the Moon*, which designates the sign the Moon held when the seed was ejaculated into the woman.

Hephaestion of Thebes also recounts three other methods, different from these, of which Porphyry makes mention – Egyptian methods, whereby the astrologer investigates which sign was ascending at the hour of intercourse.

Hephaestion explicitly warns us that by these methods one does not arrive at the *partile* horoscope. Rather this is crude investigation, with rough (as is commonly said) judgement. For determining the degrees, the only route is that which Ptolemy set forth in the third book of the *Apotelesmata*, and which we refuted in the previous chapter.

But the modern astrologers have fallen into error because, in the Arabic translation which the Latins follow, the translators mistakenly render ‘degree’ instead of ‘sign.’

Furthermore, whatever the authors may have written… what is the rationale behind this doctrine? By what observation could it have been discovered?

Astrologers answer: calculation. From the position of the Moon at the hour of birth, one understands the number of days the infant was in the womb. If you count these backwards, you arrive at the hour of conception, and thus find the Moon’s position at that time, which will be the one that ascends at the hour of birth.

In response, I ask the astrologers: who teaches us to determine the duration of the stay in the womb from the position of the Moon? Neither Ptolemy nor any of the ancients, nor even your own Hermes Trismegistus, ever revealed this. Your answer is merely that these

durations must be so determined if the doctrine concerning the interchange of the Ascendant and the position of the Moon at conception and birth holds true. You prove the truth of the doctrine by demonstrating it through the cycle, showing it happens when the durations are observed, and that the durations must be observed in this way (the doctrine will not be true otherwise). Anyone can confirm doctrines in this manner. But if, by chance, you dare to experiment, let the time of birth and the time of conception be observed and compared together – yet you might lie with impunity, since the event occurs without witnesses.

Among astrologers, those who most strongly cite empirical experience deny the precept corresponds to the truth. Abraham Ibn Ezra says he observed it five times and that it failed three times, which he attributes now to Mars, now to Mercury. I suppose that if he had observed it ten times, he would have blamed other planets as well. Hemanuel the Hebrew, a follower of Ibn Ezra, tested it twice and found that it varied from the true time of birth by seven days on one occasion. Albumasar, that deity of astrologers, believed this method can err by five degrees, as his disciple narrates. If this were so, the method is of no use to those who are only concerned with the degree. Likewise, Haly Avenrodan, the great commentator on Ptolemy, often testifies to Ptolemy's falsehoods. John of Saxony, commentator on Alchabitius, considers the method false and utterly vain, further affirming it to be useless. He asserts it is impossible for an uncertain degree of the horoscope to ever be made certain by it, which he demonstrates with an example of a proposed nativity.

Chapter Five

The fables of Mashallah are refuted, along with the other five methods of investigating the horoscope recounted by Paul of Alexandria.

Thus far, we have considered the methods more generally accepted among astrologers. But Mashallah devises another fabrication, one rejected by all and recognised as worthless. He suggests that the time from the New Moon to the Full Moon, or conversely from the Full Moon to the New Moon, be reckoned as one hour. When one of these precedes a nativity, so that the interval between it and the time of birth falls within that span, it was to be compared to the total span between the Moon's nascent and completed phase. Whatever the proportion of those intervals, that part of a temporal hour was to be taken. He insists no male would ever be born in an even hour, nor a female in an odd hour.

The following age laughed at the experiment, discovering that males and females are born in the same hour. For myself, I do not judge the vanity of this single doctrine, so much as I judge Mashallah in his entirety from this. It is natural for Man to slip, to err, to be deceived. But to write such disgraceful things, to rely on ridiculous notions, to set forth fables as if they were doctrines, to speak what manifest evidence refutes on all sides… this is not the mark of a man, if reason is truly Man's defining trait.

Nor do I deride Mashallah alone, but all astrologers of the same kind, among whom he is of the first rank. You will not easily find wiser men in that company. The great priests of this sacred discipline, the marvellous Egyptians, what incredible fictions they have invented on this matter! Paul of Alexandria recounts five different methods, in addition to the three already mentioned, which they use to investigate the truth of the horoscope in a *partile* manner. Good God, how vain, crude, futile, and false!

The first methods runs as follows: "Observe," they say, "the epoch of the Sun in a diurnal nativity, and that of the Moon in a nocturnal one. Then, determine which planet holds the *monomoiria* (a one-degree division of the zodiac) of that epoch. Take the *monomoiria* of the same planet that is closest to the suspected degree as the true horoscope."

The second method, whether by day or by night, considers only the epoch of the Moon; otherwise, it is the same as the first.

The third method, which provided Ptolemy with the occasion for his doctrine, considers the Full Moon or New Moon closest to the nativity. Then, it examines the 'despotes' (that is, the lord of the house in which this occurs) and the 'oikokrator' (that is, the terminating ruler), determining which is stronger in the natal configuration and which holds more authority therein. From this, it calculates the ascending degree.

The fourth method considers only the supreme ruler of the degree in which the Sun and Moon conjoin or oppose each other, after the infant has left the womb. Then, according to the number of terms the planet in question possesses within the ascending sign, the same number of degrees of that sign had already appeared on the horizon.

The final method does not observe only the nativity but also the conception. That is, whatever time (whether a Full or New Moon) preceded it, the degrees at which it occurred must be converted into *dodecatemoria* (twelfth part of a sign) and examined to see in which *monomoiria* they fall. The one holding the most favourable position in the chart is given authority in determining the horoscope.

Heliodorus, writing about how the Egyptian astrologers investigated the time of conception, states: "They count backwards from the nativity by nine months," as if the duration of pregnancy were always the same. These most ignorant yet self-proclaimed divinely inspired Egyptians prove mistaken at every turn.

I could raise many objections against these doctrines individually. However, for those who seek brevity, the same reasoning by which we rejected Ptolemy's doctrine suffices. For whichever method one follows, that method will always assign the same horoscope to those born at the same time but in different regions. Among mathematicians, it is established beyond all controversy that such horoscopes must differ.

Chapter Six

The origins of cities, kingdoms, factions, and laws are unknown, and astrologers have handed down no method by which they can be discovered.

It is clear the exact hour of birth is never known except by chance. Since any error in it cannot be corrected by any art, if it is not true, the accuracy of predictions cannot be maintained. Therefore, nothing true arises from the *genethliaci* [natal astrologers], who with one voice declare the *partile* horoscope the pivot of the nativity, the structure of the entire fate, and the foundation of all *apotelesmatics*.

Nor is there greater reliability in the origins of cities and kingdoms, the knowledge of which is far more difficult to determine with precision than nativities. For who has recorded them? What historian has observed them? If the diligence and credibility of historians preserve the day of the restoration or the founding of a city, they will indeed be considered remarkable. It was customary in Rome to celebrate the city's birthday, but from this, astrologers determine nothing more than that the Moon was in Libra when it was founded.

In the marginal notes of Paolo Attavanti, physician and mathematician, I found two different dates recorded for the restoration of the city of Florence: one in *Anno Domini* 801, the other in 802. Which results a completely different configuration of the stars. Many reported city constellations are no doubt fabricated from *apotelesmatics*, such as those invented by the ancients, like Julius Firmicus Maternus for Paris, just as he himself testifies about the nativity of the world.

Furthermore, astrologers consider it of great importance to determine the moment when a new faction began to prevail in a city, when a tyrant seized power, when a sedition arose among the people, when civil discord began, when a foreign nation invaded a kingdom,

when new laws were established, or new decrees were promulgated. Who could render the horoscope of such events, if not a mere soothsayer? And yet these things must first be known before we can divine anything.

Finally, even if some of those times could be determined, such moments are far less exact and certain than individual nativities. If astrologers believe the latter require correction and that no one should trust them without such adjustments, then much more correction would be needed for the former. Yet astrologers provide no method whatsoever for amending them. The methods we have mentioned apply only to the nativities of individuals.

Thus, all their predictions concerning the fates of cities and kingdoms will be incomplete and deceptive, since astrologers claim these depend on primordial moments. They either entirely ignore this, or have not received information with reliable fidelity, handed down precisely as fates demand.

Let men no longer fear death, exile, poverty, the destruction of cities, or plague, when these most audacious charlatans, in their widely published annual pamphlets, threaten such things at every turn.

Chapter Seven

It is still uncertain among astrologers how the houses should be divided, how far their influences extend, and which signs should be used.

What remains is to speak about the beginnings of the year, great conjunctions, and eclipses, for observing the moment in which they occur, astrologers prophesy the fates of republics and universal affairs.

Such times cannot be determined by them without error; however, this will become evident from what follows. We shall show the motions of the planets are still uncertain and not comprehended by an unimpeachable calculation.

Thus far, we have spoken about the uncertainty of the fatal hour for any given thing, if indeed there are fatal hours for events, as astrologers most strongly believe. We have already demonstrated there are no fatal hours, and if any do exist, they are not what astrologers suppose them to be. Now we shall make it clear that even if astrologers do determine the times suitable for prediction, they are unable to know the positions of the stars or the state of the heavens at that hour.

The first task in arranging a horoscope is to establish the twelve predefined places, which they call houses. Yet who does not know, who has touched the books of the mathematicians, how greatly astrologers are obscured in darkness here, how fiercely they disagree with one another over a matter entirely unknown?

Some distinguish these houses with six circles, one of which, revolving through the eastern point, forms the seventh house and the first, while another, the meridian itself, delineates the highest and lowest part of the sky. Four other circles, intercepted between the intermediate places, are divided through four points, and the arcs of the semidiurnal and seminocturnal circles are split into three equal portions. All these circles pass through the zenith of the world. This opinion, commonly accepted, we have already refuted.

Abraham Ibn Ezra, in his treatise on the composition of the astrolabe and elsewhere, teaches that the houses should be divided in such a way that we designate six circles, one being the horizon, another the meridian itself, by which the four cardinal points are immediately established.

He orders four other circles be drawn through the points of intersection of the horizon and meridian, as well as through the division of the falling sections of the equator between

the east and the meridian, and through the division into three equal portions. This method is highly approved of by Regiomontanus, the most eminent and learned mathematician of our age, though he suppressed the name of its author. However, it did not satisfy Campanus of Novara, who himself introduced a new method of this division – otherwise similar to Ibn Ezra's, but differing in that, instead of the equator, he used a certain artificial circle, which he called the vertical circle. From this, a different measurement arises, along with different boundaries of the houses. Regiomontanus wrote extensively in confirmation of this doctrine, relying on mathematical arguments as well as the authority of ancient astrologers.

Others divide the houses differently. Our own Ludovicus Heremita, a diligent and most precise calculator, proved that none of the methods we have mentioned align with those prescribed by Alchabitius. Furthermore, some believe the houses should be divided according to the degrees of the zodiac, which many call equal. Some use this method exclusively (the Indians often did), while others accept both types of division, the one that varies according to *anaphoras* and aligns with the equator, and the one that considers only the degrees of the ecliptic. This was observed by the Spanish Abraham, Ibn Ezra's teacher, and by Henry of Valencia, who made pronouncements not only based on where a planet is situated when the distribution is made through equal degrees, but also when it is recorded using the more common divisions.

Moreover, even if it were certain where the starting points and boundaries of the houses should be set, another doubt remains, which again calls everything into uncertainty. The influence and power of a house cannot be confined within the designated space of that house.

Ptolemy begins the division of the house five degrees before the preceding parts of the signs, while others extend it by only three degrees. The wise men of Egypt held that the beginning of a house, commonly called the cusp, was not the beginning but rather the middle,

as if it were the centre of its power. They believed it extended fifteen degrees beyond that point and likewise fifteen degrees before it.

Nearly all these diverse opinions are supported by comparable reasoning or authorities. This very uncertainty leaves the entire method of prediction by the stars (if indeed there is such a method) in ambiguity. For with the variations in house divisions, every constellation is likewise altered, since astrologers change the positions of stars according to the variation in house placement, affecting their nature, influence, and properties.

Most significantly, they assign completely contradictory and opposing qualities to locations that are spatially connected and adjacent. What could be more different than the first and twelfth houses, which follow each other in sequence? Or the sixth and seventh? The fifth and sixth? The eleventh and twelfth? The ninth and eighth? And so with the rest.

One mathematician will place a planet in the sixth house. Another will insist it belongs in the fifth, which entirely alters the prediction. And what one might assign to the ninth house, another will claim belongs to the eighth. Thus, this entire system of house division, the very root and foundation of all *apotelesmatics*, remains uncertain.

Next follows the concern regarding the signs. Which ones, indeed, should we use? Here arises a perplexing and unsolvable question regarding the movable and immovable signs, as well as the eighth, ninth, and tenth spheres, a matter we need not discuss here, since it has already been thoroughly treated above.

Abraham the Jew argues that two charts should be drawn up, as if he did not believe the dispute could be resolved. However, from this uncertainty arises the question of which signs belong to which planets, and from the previous discussion, which houses they should occupy. The entire foundation of astrological prediction depends on this. Therefore, all of it is doubtful, uncertain, and unverified.

Chapter Eight

To truly determine the locations of the planets is most laborious and involves the deception of instruments.

With the houses divided and the signs distributed, there remains the labour of determining the epochs of the stars and constellations. That is, indicating in which degrees and minutes the fixed and wandering stars are to be found. This task the unskilled and ignorant believe most easy. The more learned hesitate and disagree. For the wise know the great difficulty of truly determining the locations of the planets, which many judge not only laborious but impossible.

Andreas Summarius, a serious mathematician, thus begins his book: *Whether the motions of the stars can be known, I do not know; that they have not yet been known, I hold with the utmost certainty.*

He asserts his reasoning as follows: those who measure the motions of the stars must first determine the position of the star by means of an instrument. With the star's position assumed, they use it as a supposition to direct their calculations concerning its course. If the position is correctly detected, the calculation of future motion will be true, for astronomers rely on mathematical reasoning, which is by no means fallible. However, the detection of the position is not entirely reliable, simply because the instrument itself is deficient.

No magnitude of an instrument, however great, can be sufficient for divisions that are perceptible to the senses, which is necessary to avoid error (the distance of any given star from the observer's location, given the universe's vast extent, surpasses the scope of an instrument). Since the relation of the parts of an instrument, a very small object, to the parts of the vast whole cannot be grasped by the senses, the position of a star cannot be observed without error.

Error may also remain hidden, but with the passage of time, becomes more evident, as reliance on each successive correction moves results further from the true position. Ptolemy confirms this. Because of the fallibility of instruments, he orders astronomical calculations to be renewed every two hundred years, since that span of time uncovers faults in the old observations. By means of new observations, these errors might be corrected. These new observations will not be without fault, but at least they lack errors that can be perceived by the senses. After many completed cycles, when those observations significantly deviate, they will be amended again, through a correction as precise as possible.

Thus, Ptolemy's tables, once considered essential by astrologers, have become useless. Indeed, the studies of more recent scholars repeatedly correct previous observations, for, as I have said, there is no craftsmanship of any instrument, be it ever so skilful and refined, that can report the position of a star with faultless accuracy.

Abraham the Jew reports in his book concerning astronomical tables a case of two astrolabes made with the utmost precision, and of such great size the diameter of each extended nine palms. Yet, when the Bersechit brothers, makers of instruments, together observed the altitude of the Sun as it entered Aries, the two instruments did not yield the same result, but differed from each other by two minutes.

Henry Bate of Mechelen, distinguished in the astronomical art as in all of mathematics – he wrote a noble treatise on the construction of the astrolabe – considers it either impossible or nearly impossible to create an infallible instrument. While he was in Paris, he reports seeing two extraordinarily well-constructed large quadrants set up for the observation of the Sun's maximum altitude, at midday during the summer solstice. With one instrument, the altitude was recorded as sixty-four degrees and forty-two minutes. With the other, it was the same in degrees but without any minutes. Thus, the error amounted to forty-two minutes.

Even those who construct horoscopes can be deceived by instruments, as we have been warned by Averodan. Henry Bate, whom we have just cited, demonstrates through thousands of words in his *Mirror of Natural Things* that neither Ptolemy, nor Jabir, nor Al-Battani could determine the exact size of the diameters of the Sun and Moon more precisely than through eclipses. Reliance on instruments for this matter would be suspect.

Ptolemy in his *Almagest* and d'Ailly in the seventh book *On Vision* discuss how the eyes can be deceived in observing the positions of the stars. For even if the sky is clear and free of clouds, what prevents an unnoticed wind from blowing? The philosopher Aristotle writes that when the east wind blows, the stars appear larger.

Leo the Hebrew, a distinguished and celebrated mathematician, as if distrusting the ancients, devised a new instrument whose mathematical rules are exceptionally refined. However, when he observed two fixed stars with it in the same year, his second observation differed from the first by two degrees. He attributes this to changes in the state of the air.

Chapter Nine

Various opinions on the motions of the planets, the inequality of the year, and the greatest declination of the Sun.

Thus, perhaps, there arises among authors great diversity of opinion concerning the motions of the stars. If one could determine true positions with infallible instruments, they would not have delayed restitution, nor disagreed with one another. Ptolemy in the *Almagest* calls the motion of the Sun the most evident of all, and we ought to measure the others with a more certain standard. But how little this has been truly ascertained. We see the most contradictory traditions written on it by the foremost astronomers.

The ancients, with Hipparchus, wished the solar year to consist of three hundred sixty-five days, plus a fourth part of a day. Others added only a fourth part. Hipparchus, writing in the one hundred seventy-eighth year after the death of Alexander, from his own and the Chaldeans' observations, calculated that less than a fourth part of a day should be added; but he did not precisely determine how much was lacking. Later, Ptolemy, in the two hundred eighty-fifth year, defined it as the three-hundredth part of a day.

Al-Battani, observing the heavens seven hundred and forty-three years after Ptolemy, found the motion of the Sun to be faster, because it falls short of that fourth part by one hundredth and sixth part of a day. Thebit said that the year consists of 365 days, 6 hours, 9 minutes, and 12 degrees.

Thence arises great diversity of opinion. Some think all years are equal, such as Ptolemy and Alfonso. Others, such as Al-Zarqali and Isaac the Israelite, consider them unequal, and some among more recent scholars agree.

Since the Sun sometimes returns more quickly and sometimes more slowly to the place whence it departed, such writers hold the cause of this inequality to be this: the eighth sphere does not always move from west to east, as Ptolemy and others think, but sometimes moves from east to west. When the motion of the eighth sphere is towards the region of the sky where the Sun is reflected, the motion of the Sun becomes faster. When it moves towards the opposite place, the Sun's motion becomes slower. Hence, at different times, the year has been observed to be sometimes longer, sometimes shorter.

The Isaac whom we have cited, in that book titled *Iesodolam*, as if one were to say 'the foundation of the age,' wrote in the year of grace 1310, the year 5700 of the world according to the Hebrews. He thought the years were then at their shortest, so that they could not be shortened any further, but now the time had come for them to lengthen little by little due to the motion of the eighth sphere.

Among the longest possible duration and the shortest, the intermediate delay is 365 days and five hours, then the hour divided into one thousand and eighty parts contains nine hundred and ninety parts, then forty-eight small divisions, each of which is the seventy-sixth part of those one thousand and eighty parts. I read this scrupulous calculation in the most ancient writer of the Hebrews, Rabbi Adabaraba, Adam son of Abraham.

Finally, when the motion of the Sun is uncertain, solar eclipses reveal it, which precede the time in the tables by more than half an hour. This is also taught by Andreas Summarius, and is declared by the evidence of the senses. Likewise, Henry Bate, in the book *The Mirror of Natural Things*, states that in detecting eclipses – whether you consider the place, the hour, or the magnitude – there will be an error if one follows the numerical doctrines of Ptolemy and Al-Battani. Paolo Attavanti, a distinguished mathematician, observed the entry of the Sun into Aries with the most diligent annotations. He found it faster by a third of an hour than the time defined in the tables.

Pierre d'Ailly records in the *Elucidarium* that when the entry of the Sun into the vernal equinox was observed in Paris in the year of our Lord 1364, Alfonso's tables deviated from the truth. Since they are blind in such great light, that is, in the most manifest motion of the Sun, where if any error occurs, that errors occur in all other cases, what will be the case with the motion of Mercury, which almost never reveals itself to mortal eyes?

Sosigenes, the teacher of Alexander of Aphrodisias, states Mercury cannot be more than twenty-two degrees distant from the Sun, while Theon, Paul of Alexandria, Heliodorus, and Porphyry say twenty-three. Ptolemy even claims twenty-eight. A certain distinguished mathematician confessed he had discovered nothing on Mercury's motion.

Furthermore, Mars was about one degree and thirty minutes slower than had been thought, though in this matter the diligence of later scholars should be applied more precisely. The same mathematician reported that he had observed the maximum declination of the Sun

from the equator to be twenty-three degrees and thirty minutes. Ptolemy gave the same degrees but fifty-one minutes. Al-Battani recorded twenty-three degrees and thirty-six minutes, Al-Zarqali more than twenty-three degrees and thirty minutes. Abraham Ibn Ezra, the eminent mathematician, states in the sixth book *On Revolutions* that the degree on the horoscope cannot be determined when the Sun enters the first degree of Aries. Thus, the time the Sun reaches Aries cannot be precisely detected either by a computed motion or by any kind of instrument, which Avenrodan, in his exposition of Ptolemy, openly acknowledges.

The oft-cited Ibn Ezra, whenever computing anything with precise reasoning, employed three canons: those of Ptolemy, the Persians, and the Indians, since all determined the planets differently according to different locations. Plutarch cites Ptolemy Posterior, and Aemilius the Roman, a most eminent mathematician contemporary with Trajan, in a work on the problems of Roman affairs: "At the very time when astrology has reached its highest point, the inequality of times has surpassed the skill of mathematicians. Their numbers and calculations have often proven deceptive and elusive."

Chapter Ten

An error of a single degree, or even of a single minute, can produce many errors. An astrologer cannot make a judgement through the revolutions of years or nativities, or even through great conjunctions.

From this uncertainty of celestial motions, who does not see divinatory astrology itself faltering entirely? If the readings err by a single degree, astrology must necessarily fall, for it will change the part of the sign in which a star is found, often altering the boundaries (which some admit have equal power in houses, others greater, and all the greatest). Even the exaltations, prescribed for determined degrees, will vary in *monomoiria*, and at times the

confines of the *decans*. If a planet occupies the last degrees of a sign, an error of one degree may transfer it from one sign to another, so what was in Taurus will be in Gemini. The Moon is fortunate in Taurus but unfortunate in Gemini.

Moreover, a masculine part will be changed to a feminine one, a bright to a dim, a dim to a dark, a low to a high, a full part to an empty, a morbid to a most fortunate. Among astrologers each degree has different properties from another, indeed even the minutes, whose distinct properties Asclepius handed down in *Myriogenesis*. When the place of a planet is altered by a degree or minute, the power and influence of the star might be greatly changed. And just as an error in degrees sometimes alters a sign, so an error in minutes sometimes alters a degree.

But even locations will sometimes be mistaken due to the fall of a single degree. What was in the West may be placed underground, and what pertains to the Ascendant may be cast into the obscurity of the twelfth house. In *dodecatemoria*, an error of one degree will cause a deviation of twelve degrees. If the epoch of a star is incorrectly recorded, none of the so-called *fortitudes* will be rightly established. Add to this the deception in radiations due solely to the variation of one part, since a 'perfect' radiation produces one effect, an 'applying' one another, and a 'separating' one yet another. Add to this the gravest of all errors: the failure to direct the rays of the planets as they should be. If the astrologer errs by a single degree, a mistake of an entire year will result.

These are the greatest and most extreme offences in this profession, yet if you compare them with other errors, they will seem small. And these errors must necessarily occur when astrologers derive initial hours from the motions of the planets, which we have delayed discussing until this point.

The beginning of the year must be determined by the Sun's entry into the first minutes of Aries. However, if astrologers are mistaken by half an hour, the entire constellation will be

entirely different, and a great variation will arise. The same occurs if astrologers take the beginning of the year not from the Sun's entry into Aries but from the preceding Full Moon or New Moon.

I do not see why Ibn Ezra and Avenrodan think error cannot be avoided in the former case but believe it can in the latter. The exact time of conjunction cannot be determined unless the motion of both celestial bodies is correctly known. Henry Bate also raises this objection: how can annual revolutions of nativities, determined by the return of the Sun to the same position, not be wrongly defined when the exact time of its return remains unknown?

How will they determine the Ascendants of the great conjunctions if the motions of Jupiter and Saturn are not precisely understood? Abraham the Jew believes we are so far from perfect knowledge that it is a great achievement to know the day on which these two planets will align. John of Saxony agrees, saying the Ascendant of a great conjunction is not what was ascending at the hour of the conjunction itself, but rather what was ascending at the beginning of the year in which it occurred.

A defence of one error with another.

The Ascendant of a conjunction does not cease to exist simply because it is unknown to us. Better to say we cannot know what the conjunction will produce because we do not know the Ascendant, rather than to invent simply because the truth is unknown. What does the conjunction have to do with the Ascendant of a year that may have begun many months earlier? What reason is there to observe the Ascendant of the influencing luminaries, but not that of the conjunction itself?

Finally, even if we grant that the Ascendant of the year has power in the conjunction, they cannot deny that the proper Ascendant (since an entirely different constellation arises from it) is of equal or even greater importance. Since astrologers do not know this, they must

necessarily err in their predictions regarding the effects of the conjunction. I pass over the fact that, according to Ibn Ezra, even the Ascendant of the year is uncertain.

From all of this, the shameful error of Albumasar is evident. In the first book of his *Great Introduction*, he claims it does not matter if an astrologer is mistaken by one degree. Albumasar does not understand the astrology he defends.

The common accusation, that astrology is condemned by many due to ignorance, does not hold true. Rather, astrology should not be condemned without thorough examination. Nor should it be embraced unless viewed from a distance, and greeted only from the threshold.

Chapter Eleven

Differing opinions concerning the motions of the eighth sphere, the distance between the head of Aries of the eighth sphere and the head of Aries of the ninth sphere, and the apogee of the Sun.

But we have thus far spoken only of the motion of the planets, which are perhaps more thoroughly investigated. Who will faithfully render the motion of the fixed stars? That these celestial bodies possess great, indeed preeminent and wondrous power, all astrology confesses. Who, I ask, will correctly place the fixed stars in a horoscope? Or who will deny the significance of an error of a single degree? There is but one degree in which the fixed stars are believed effective, that is, the cardinal points or the luminaries.

"But we have the positions of the fixed stars," astrologers will say, "in astrolabes, and in numerical tables commonly and widely recorded."

This is what I was warning about when I began to dispute these matters: these things appear very easy to the trivial astrologers, whose knowledge consists entirely of a few sheets of paper. Yet to the learned and skilled, they are inextricable; for when one delves but a little

deeper into literature, one perceives that authorities disagree on these matters as much as the east differs from the west.

The Egyptians, the Chaldeans, and, in short, all ancient opinion holds that the stars move by only one motion, which we call the diurnal motion. Hipparchus introduced another motion, by which they would be carried along like the wandering planets from west to east. Let this, then, be the first controversy: whether the fixed stars move by their own motion or not. Recent scholars say there is no controversy, since it is no wonder that what was observed by later generations could not yet have been detected by the ancients.

But some among the younger generation defend the opinion of the ancients. Proclus, who came long after, was far more skilled than Ptolemy in all of mathematics, as is easily shown by his astrological assumptions, his treatises on the sphere, the composition of the astrolabe, his commentaries on Euclid, and many other writings. In his commentaries on the *Timaeus*, as well as elsewhere, Proclus refutes Hipparchus and Ptolemy, who thought the fixed stars revolved around the poles of the zodiac towards the east, completing one part every hundred years. Proclus believed it necessary to follow the Egyptians and Chaldeans, who through long-term observations reported nothing of the sort. The evidence of the senses aligns with ancient tradition so clearly that Ptolemy could not have dissented from it unless he were blind.

"If the stars move," Proclus says, "upon the poles of the zodiac, as Hipparchus and Ptolemy suppose, it necessarily follows that in these regions the Bear (Ursa) would noticeably sink towards the horizon. The Bear, however, has been called 'never setting' since the time of Homer. And Canopus ought no longer to be visible, since that star, when it appears to those living in the third climate, only briefly rises above the horizon. For those dwelling in Rhodes, as Posidonius writes, it barely grazes the eastern horizon."

Since the Bear still appears as unsetting as it did in past centuries, and Canopus retains the same position, it is evident from sensory observation that the motion of the fixed stars introduced by more recent astronomers is false.

If, perhaps, one objects that the calculations of planetary motions are rightly derived from sensory testimony by those who, in arranging numerical data and in setting forth the canons, assume the motion of the fixed stars, that objection, Proclus says, can be refuted in two ways.

Firstly, even those who omit the motion of the fixed stars when calculating the motions of the planets nonetheless establish canons concerning the revolutions of the stars in accordance with appearances. Although they do not make the stars immobile, they still arrive at an agreement with the most exact reasoning.

Secondly, truth can be derived from false calculations, so what is derived from sensory perception does not establish the truth of the assumptions.

The most learned philosopher and mathematician Abraham Ibn Ezra, frequently recalls both opinions, one that the fixed stars are in motion, the other that they are immobile (the latter being attributed to the Indians). Ibn Ezra never takes a side but leaves the matter undecided. Thus, in his book *On Nativities*, he prescribes that a horoscope be made in two ways: one as if they moved, the other as if they did not.

I define nothing in these matters except that nothing certain can be defined. But the truest conclusion is that the opinion of the ancients favours the view of non-motion, since the proponents of the opposite doctrine agree on nothing among themselves.

Ptolemy, following Hipparchus, believed the fixed stars moved from west to east. Al-Zarqali the Moor held that, after advancing a certain distance, they receded from east to west, a position followed by Isaac the Israelite, who claims it has been observed most reliably.

Thebit Bencora rejects this motion, conceiving another, which inclines towards the south and the north. More recent scholars approve Thebit's discovery, and also admit Ptolemy's opinion that the stars advance towards the east and do not change their course. Yet they dispute the speed of movement, disbelieving the doctrine that one part is completed in a hundred years.

For Avenrodan, Moses Aegyptius [Maimonides], and Ibn Ezra report that the span of one part is traversed in seventy years. Al-Battani states it takes sixty-six years, making the stars almost one and a half times faster than Ptolemy. Paolo Attavanti asserts they revolve even more swiftly than Al-Battani.

Who will judge these opinions? "We, the more recent scholars, have ascertained their positions with reliable instruments, and therefore we cannot be mistaken," say the astrologers. But what then deceived those ancients, who lacked neither instruments nor skill in the art?

It is commonly stated in this age that the moving Aries is distant from the immobile Aries by twenty-five degrees. But Ibn Ezra, in a certain book titled *The Eight Parts of Astrological Matters*, reports that at the time he was writing, the distance was different. He wrote in the year of human salvation 1153.

Ibn Ezra preceded our time by approximately three hundred and forty years. If we follow the motion reported by Al-Battani, whose stars are swifter than the others, the stars would have moved only five degrees from Ibn Ezra's time to ours. Today's distance would not be twenty-five degrees, but thirteen.

Was Ibn Ezra mistaken? He had reason and instruments available to him.

Maimonides, in the book titled *Mismethora*, which in Latin means *The Second Law*, says, at the beginning of the first part, that at the time of the Cataclysm, the moving Aries

coincided with the immobile Aries. Afterwards, the eighth sphere always moved towards the east, one degree every seventy years.

The waters inundated the lands in the year of the world 1656. From the foundation of the world, as the more accurate reckoning teaches (it is not relevant here to examine the matter thoroughly), about five thousand three hundred years have passed. From the Flood to our time, there are about three thousand six hundred years, or thereabouts. Consequently, the eighth sphere would have moved by more or less fifty-two degrees in all those years. Fifty-two degrees, the moving Aries would be distant from the immobile Aries.

Isaac the Israelite writes that both signs coincided in the year 560 after Christ's birth. Pierre d'Ailly, in the *Elucidarium*, states this happened in the year 260 after Christ, a calculation differing by three hundred years from the former reckoning. Angelus Mantuanus and more recent scholars assert this occurred in the year of grace 1415, with a few additional months.

The same is reported by Isarith. When he calculated the positions of the Sun and Moon relative to the eighth sphere, he discovered the New Moon of March took place in the five thousand two hundred and twenty fourth year from the beginning of the world, near the fourteenth part of Pisces. However, when Angelus calculated that same New Moon relative to the immobile signs (he used the tables of Emanuel, which are titled *Baal Cuaphim*) he discovered it in the twenty-eighth degree of Pisces. If he had followed Alfonso's tables, it would have been in the twenty-seventh degree and fourteen minutes.

From this, it can be inferred that the moving signs were distant from the immobile ones by thirteen or fourteen degrees. However, this author [Angelus] wrote only a few years before our time. He finds it astonishing that the Ozonian tables report that the star located between the horns of Aries – the beginning of the moving Aries – was distant from the immobile Aries in 1360 by twenty-four degrees and fifty-seven minutes.

Isaac the Israelite and Roger Bacon flourished about forty years earlier. Each thought that in their own age, the immobile Aries had deviated from the moving one by no more than ten degrees. For each of them followed Al-Zarqali, who estimated that the greatest possible distance was ten degrees. Isaac recorded that this limit had been reached in his own time. Therefore, the moving Aries would again begin to approach the immobile one, turning backwards with a motion revolving towards the west.

Thus, let us conclude: either the mathematical instruments do not deceive, or they do deceive. If they do not deceive, how is it that Isaac and Roger, observing the stars, judged that the stars of the moving Aries were displaced no more than ten degrees from the equinox? Yet, if the Ozonian tables and the more recent opinions are true, those stars had moved more than twenty-three degrees from that point. An error of thirteen degrees becomes evident.

But if the instruments do deceive, how do our contemporaries know that they themselves are not deceived? Especially when the foremost men in this field disagree, and hold such a great variety of opinions? If anyone believes they can judge this dispute, they do so with a more brute reasoning than is fitting for one who judges celestial matters. Regarding the positions of the fixed stars, anyone pronouncing a judgement may perhaps be correct by chance, but they will by no means be able to attain this through reason.

Nor should it be overlooked that Proclus and Ptolemy deny that the apogee and perigee of the Sun move. However, that which they call in barbarous terms *augen* and the *opposite of augen*, more recent scholars assert do move. Leo the Hebrew refutes this, defending the true opinion of Ptolemy.

I omit here the debate over the equation of days, which astrologers argue about without knowledge. From this arises the greatest uncertainty in determining the horoscope.

Chapter Twelve

Concerning directions, how myriad are the opinions of the astrologers.

Above all these matters remains the inextricable task of composing calculations concerning rays, and those which Ptolemy calls *aphesis*, commonly called *directions*. Mathematicians wound each other here, with savage blows on both sides. Nor can they rely on authority, or on arbitrary matters, or on the experience of so many ages.

The opinion of more recent scholars is that the most precise radiation is composed from direct, oblique, and mixed *anaphoras*, according to the variety of locations. However, this will result in the following: if someone is born in a region where the vertex is elevated by forty-eight degrees above the horizon, and the first part of Capricorn is in the Ascendant, a trine radiation will occur in the parts of Cancer. Yet we know Cancer is diametrically opposed to Capricorn.

Henry Bate observes the configuration of the planets according to the placement of locations, so a trine aspect occurs from the place that holds the fifth position, without any consideration of the sign itself, and likewise for the rest. Al-Battani measures the intervals through the degrees of the zodiac, which he calls equal, unless a star has declined to the side in either direction, though this variation is minor, not exceeding thirty minutes even if it has declined by ten degrees.

Regiomontanus followed this method, which he transmitted. So did Abraham the Foremost, teacher of Ibn Ezra. But if you claim through empirical experience that astrological figures should be determined through *anaphoras*, Ibn Ezra will oppose you. He claims that, through long observation, it has been recorded countless times that figures should be determined by equal degrees.

There are those who always use direct *anaphoras*, to which Ptolemy objected. Ptolemy does not observe latitude, except in the case of conjoined planets. Haly Abenragel

does so in all radiations except in opposition. Albumasar even includes opposition, which others falsely accuse him of neglecting.

I omit how astrologers differ on how far the influence of radiation should extend. Some say three degrees, some say five. Others say in the Moon's case up to twelve parts, and some even say thirteen, like Porphyry.

Thus, the same issue presents an unresolvable mathematical disagreement on directions (to speak in the manner of astrologers). For the Egyptians always used the *anaphoras* of the region. Dorotheus, in directing the first part, always used direct affections, which experience frequently confirms, as Abraham attests. Ptolemy and almost all later authors place the star in the East and the West according to the ascensions of the region, placing it in the fourth or tenth place by the equator, and in the middle places through the mixed ones. The same is held by Almeon in the seventh chapter of the fourth treatise on directions. Albumasar directs the degrees through the zodiac. Thus the eighth section of the second treatise of the book *On Great Conjunctions* directs the Moon to the place of the conjunction of the unfortunate stars. The same is held by Ibn Ezra in the book entitled *The Beginning of Wisdom*, confirming even Al-Battani's authority.

There are those who think both methods should be used, extending the rays and directing the stars by the degrees of the signifier and the proportion of the *anaphoras*. This seems to have been the opinion of John of Seville in his *Isagoges*. In the second part of his work, he covers this in a four-part chapter with reference to the first house. Others extend the rays through the degrees of the zodiac, but direct them through ascensions, as both Mashallah and Avenrodan seem to have ascribed to Ptolemy. Against this, Abraham the Jew brings forth the same reasoning, directing the stars with equal degrees.

I omit that astrologers disagree regarding which part of the planet should be led, or where Ptolemy dissents on this matter in *Apotelesmata* (somewhat explained by Avenrodan). How great the difficulty for those who think mixed ascensions should be used!

Regarding Ptolemy, the most learned believe he did not prescribe this correctly or sufficiently. Paulus Alemanus, a distinguished mathematician, who now lives with the highly learned Duke Guidobaldo of Urbino, once wrote that he had never seen anyone direct a star to the place of the Triangle correctly. He also (which should have been said earlier) denies the fidelity of the circulated tables concerning the latitudes of planets.

From all this, in the seeking of initial hours, whether of births, cities, or constellations, then in arranging the chart, whether the axes are established, whether the places are pre-defined, whether the signs are divided, or the seats assigned to the stars, whether they are stationary or wandering, whether the schemes are composed, or the *aphesis* are counted… how wide is the door for errors! Truth and mathematical certainty remain unexplored in the dark depths of Heraclitus' river.

Here ends the ninth book of Giovanni Pico della Mirandola's Disputations Against Divinatory Astrology.

Disputations Against Divinatory Astrology

By Giovanni Pico della Mirandola, Count of Concordia

Book Ten

Chapter One

Epilogue to those things discussed thus far. What must be done in the following books.

We have thrown down astrology, stone by stone.

The fates of things below do not depend upon the heavens, nor are they signified by them. Nor, if there is a relationship, is the lower world affected in any way other than according to a natural affinity. These claims are supported by the perpetual and stable condition of the celestial bodies, always the same and unchanged, rather than changing, as astrologers falsely imagine, like a chameleon according to places or distances.

Nor can mere mortals understand what the heavens might cause or signify. We are too weak to discern what fatal hours might be or which celestial beings possess the power to decree fate. Indeed, whatever astrologers have handed down on these matters deviates entirely from reason. They have rendered into first principles things that are not first principles at all, while omitting the true ones. Either through ignorance or neglect of the greatest celestial powers, their predictions rely on fictitious and absurd causes, to which neither truth nor any efficient power adheres.

It was thirdly demonstrated that not only do astrologers' expected outcomes not occur, but these matters are utterly impenetrable and inaccessible to human understanding. This ought to be acknowledged by the profession, since they require initial hours to predict, and

must take into account every moment of the supposed celestial causes and positions – neither of which can be known, as we argued in the previous book.

But even were astrologers able to accomplish this, they would be so far from fulfilling their function that they would not have even begun their task. For the astrologer's proper task, once the chart has been established (the work of the mathematician), is to investigate the effect of the observed constellation. Among all endeavours, this is the most difficult. If such things could be established by reason, astrology would be a science; if by experience, it would be an art. But if neither by reason nor by experience, then it is neither an art nor a science, but mere rashness, an unfounded illusion, the most fabulous fraud of tricksters.

Therefore, we shall first strip astrologers of the authority of reason and then of the credibility of experience.

Chapter Two

The arguments of astrologers are empty and ridiculous.

General matters concerning the stars have been handed down by Aristotle, Plato, and the other philosophers reliant on reason. This concerns stars' eternal substance, circular motion, and similar topics. However, these authorities never revealed the particular properties of the stars, since reason indicates nothing about them that could properly be called physics. In the case of corruptible things, which we handle, perceive closely, and know more intimately, we recognise peculiar qualities only through their effects and outcomes.

The arguments astrologers fabricate to prove their doctrines are so far removed from reason that nothing more irrational could be conceived. They fail to demonstrate anything, and fail to even reach the level of rhetorical *enthymemes*. They are false, trivial, contradictory, defective, and ridiculous, as we shall make clear by examining each in order.

Chapter Three

The falsehood of a twofold principle whereby astrologers determine which house is stronger. Even were it true, it would not support their conclusion.

We shall begin with the arguments by which astrologers prove the properties of houses, though we have already demonstrated these houses have no properties and that their intervals cannot be known.

First, we shall address the magnitude of a house's influence. Second, we shall discuss its quality, showing the principles on which the arguments rely are false and that, even if they were true, they do not lead to the conclusions astrologers desire.

There are two main premises by which astrologers determine which houses are stronger and which are weaker.

The first is that those houses prevail which are connected to the Ascendant by an affinity of rays, whether trine, square, or sextile. Sluggish and weak houses are those that are not connected.

The second is that the cardinal points, which astrologers call angles, have the greatest power. Next in power are the locations that follow the cardines. In third place are those that decline from them, which the Greeks call *apoklimata* and the barbarians call *cadential*.

These principles are false, or, if granted, their conclusions contradict both themselves and the very principles they rely on. The falsehood of these principles is demonstrated as follows: the effectiveness of a house can only be attributed to its relation to the horizon. A star is considered stronger when it is positioned above us and exerts a greater influence. A philosopher, persuaded by natural reason, will readily admit this; an astrologer, too, is forced

to concede it, for the power of these locations must either derive from the natural quality of space itself or from its relation to us.

That such power cannot derive from space itself is clear. We have already shown space has no such natural force. Otherwise, the division of houses would remain the same no matter where one is on Earth. If the parts of space possessed inherent properties affecting the stars positioned therein, these properties would not vary with the heavens but would be the same for all.

This is utterly contrary to astrology as a whole. Astrology decrees that the same star, located in the same part of space, is in the Ascendant for me, in the second house for another, in the twelfth for another, in the third for yet another, and in the eleventh for another, depending on the different inclination of the heavens. Such inclination should not be taken into account if the properties of locations follow from the nature of space itself, rather than a relation to us. The revolution of the heavens does not alter that nature at all, whereas the relation of space to us constantly changes.

But if we grant that a location is more effective if a planet there acts more strongly upon us, the foundations of angles and Ascendant immediately collapse. Any place beneath the Earth will be weaker than any place above the Earth. Any place that rises higher above the horizon will be considered more powerful. The twelfth house will prevail over the first.

John of Eschenden, author of the *Summa astrologiae judicialis*, which they call the *Summa Anglicana*, granted this, believing reason utterly irrefutable, and greater than the authority of all astrologers. Ptolemy himself also recognised this reasoning and largely followed it. In the first book of the *Apotelesmata*, he insists the strongest position of all is the Midheaven, because the rays of the planets positioned there affect us most powerfully. Next in strength is the eleventh house, for the same reason. The weakest planets are those that lie between the western horizon and the lowest part of the Earth.

These conclusions contradict the rest of the astrologers, the majority of whom assign pre-eminence to the eastern horizon over all other locations. Mashallah, Julius Firmicus Maternus, and Albumasar all do this. However, Ibn Ezra agrees with Ptolemy and does not regard the cardines as primary. Rather he considers the eleventh house superior to all except the Midheaven.

If astrologers were to declare a planet in the fifth house is the weakest, since it lies between the fourth and seventh, they would contradict themselves. In the third book, when speaking of the span of years, Ptolemy asserts everything above the Earth is superior to what stands below it. Yet forgetting what he had said earlier, he then prefers the eastern horizon over the eleventh house. Later, following other astrologers, he rejects the twelfth house for an exceedingly flimsy (and certainly false) reason, claiming the denser and darker vapours of the Earth, rising from moist exhalations, disturb and weaken the descending planetary influence.

If reason holds, one born under a misty sky would always be unfortunate, since all the planets will be under darkness for him, as if placed in the twelfth house. And why should a star positioned in the east not be affected in the same way? Or do more vapours rise once daylight has appeared, enough to raise vaporous fumes but not yet dissipate them?

Perhaps this reasoning applies to the Sun, but at midday, what star residing in the twelfth house would be hindered by a vaporous atmosphere? More correctly, Ptolemy considered only this in the first book: that the Midheaven is the most powerful of all locations, and a position is more or less intense depending on how closely it approaches the zenith. This is the only conclusion, if we consider only the efficacy of natural forces. For perhaps a place beneath the western horizon could have some property the Midheaven does not possess (if indeed such differences exist).

But if a planet is to act with great force, what else will be the cause but its power to diffuse its rays upon the horizon? It is, therefore, exceedingly foolish to consider a fixed star

powerful in the fourth house, hiding deep beneath the Earth, when, even if it shines at the very summit of the heavens, it does not reach the angles in certain parts and thus will have no power at all.

A planet in the twelfth house is not vital, yet when placed in the fifth, it is considered so, even though, for those who reason properly, the fifth house holds the seat of darkness and could be called the twelfth. No one would seriously believe we are more strongly affected by the Sun when it is still twenty-five degrees away from the east than when it has descended by one degree and is sinking into the west. Yet in the former case, it belongs to the Ascendant, while in the latter, it pertains to the sixth house. Much less would astrologers persuade anyone (except those utterly devoid of sense) that a planet is stronger in the fourth house, beneath the depths of night, than if it were in the eighth or twelfth house.

For the trine connection with the Ascendant is refuted by what was stated earlier concerning the distances between rays. If we wish to follow strict reason, the *anaphora* of a planet has more relevance to the Ascendant than a fortunate star separated by so many spaces. If such a connection holds any weight, why would a place joined to a better angle not be more powerful? Reason, as well as various authorities, teaches that the highest angle is superior to all others. Therefore, the sixth house, being trine to the Ascendant, ought to be considered favourable, and by the same reasoning, the ninth house should be counted as such due to its affinity with the Ascendant.

Thus far, we have exposed the falsity of these supposed principles. Now, we must show the conclusions drawn from them are inconsistent. For the eighth house is not always bad. If it is considered bad simply because it is disconnected from the Ascendant, why does a planet placed there often cast a trine aspect to the east? Similarly, a planet in the second house sometimes sends a sextile ray to the Ascendant. Therefore, astrological conclusions are not

universally valid, unless the houses are divided by zodiac degrees, which astrologers do not accept. Consequently, they prove nothing.

Let our opponents also answer this. If affinity with the Ascendant and an angle makes a house good, is one of these privileges sufficient, or are both required? If only one suffices, the eighth house, which follows the western horizon, should be considered good. If both are necessary, the second house, being separated from the Ascendant, must be bad.

Moreover, Heliodorus, following Paul of Alexandria and other authorities, writes that malefic planets afflict more severely when placed in cadent houses. But if the lowest place, by its very nature (as astrologers themselves often claim) weakens bad rays as much as good ones, why should it cause greater harm?

Chapter Four

The arguments of astrologers, by which they bolster their doctrines, can be reduced to five categories, all weak and ineffective.

Let us examine the errors by which astrologers attempt to prove the properties of the houses – such as one house signifying brothers, another parents, another friends, another death, and yet another foes. But since these same claims are often the subject of refutation, I will first refute certain general modes of argumentation that astrologers use whenever they attempt to prove anything. Then, by overturning the foundations of each particular doctrine, I will indicate from which category their argumentation is derived.

This will be done in appropriate sections, so that, given principles and reasoning methods, I may show whether astrological conclusions logically follow.

The entire astrological method of proof can be reduced to five main categories:

(i) Arguments based on numerical order.

(ii) Arguments from parabolic analogy.

(iii) Arguments derived from mathematical principles.

(iv) Arguments from astrological principles.

(v) Arguments from dialectical reasoning.

From the order of numbers, astrologers argue as follows:

The first climate is subject to Saturn, the second to Jupiter, and the third to Mars, because Saturn is the first of the planets, Jupiter the second, and Mars the third. There are twelve houses and twelve signs. Therefore, the first sign corresponds to the first house, the second to the second, and so on. But the third sign is Gemini, so the third house signifies brothers, as if they were twins. Similarly, the first planet corresponds to the first house, the second to the second, and the third to the third. But Jupiter is the second planet and signifies wealth. Therefore, the second house will signify wealth.

This method, based on numbers, is easily refuted. For when one speaks with philosophers or dialecticians, it is clear that this reasoning not only does not compel belief but does not even prove anything; indeed, it neither persuades nor suggests plausibility.

First of all, it is a futile and senseless assumption that the first of one category must correspond to the first of another category by some natural affinity. The first element is fire, the first planet is Saturn. What could be more opposed to fire, according to astrologers, than Saturn? Mars is the third planet, and water is the third element. Is Mars not as different from water as fire is from water? Aries is the first sign, Saturn the first planet, yet according to astrologers, Aries has no proportion with Saturn; it neither rules over nor dominates it. Indeed, it is afflicted by it.

Therefore, this assumption is deceptive, crude, and ignorant. Even were it true, it would be anything but certain. It remains unclear whether one should ascend from the Moon

towards Saturn or rather descend from Saturn to the Moon. Each follows its own reasoning as the first in the planetary order, and the position and order of the intermediates remains entirely ambiguous.

The ancient dispute remains unresolved: is the Sun second after the Moon, or is it rather in the middle of the planets? The Egyptians believed it closest to the Moon, while the Chaldeans considered it in the middle. Ptolemy and more recent thinkers regarded it as being in the middle. However, not only did the sharpest mathematician, Jabir Ibn Hayyan, hold a different view, but Theon, the Greek interpreter of Ptolemy, disagreed with his master, and believed the Sun should be placed above the Moon. Plato and Aristotle also affirmed this.

Nor is it surprising that the greatest authorities disagree on this matter. Many arguments have been handed down on both sides, with no certain conclusion.

When you remove parallels, that is, distinctions of sight, mathematics indicates nothing as to which of the stars is superior. Nor is it only the Sun in doubt, but also Venus and Mercury. Concerning Mars, Jupiter, and Saturn, it is established doctrine, says Andreas Summarius, that they are all above the Sun. Yet the order in which the planets lie is neither known, nor can it be known, since there is, as they say, great diversity of aspect. Any reasoning derived from general principles will be vain and dialectical rather than certain and mathematical, unless based on proper principles.

Such is the reasoning of Ptolemy, who claims that the Sun is rightly placed in the middle among the planets because some, such as Saturn, Jupiter, and Mars, recede from it in their orbital length, while others, like Venus and Mercury, always follow it. But this is a frivolous conjecture and does not hold, for the Moon moves away from the Sun as much as the superior planets do. Therefore, the Sun is not in the middle between those that recede from it and those that do not.

Alpetragius' reasoning is equally weak – that the inferior planets are faster in motion – though he proves those appearing faster are in fact slower. Thus, the position of Venus will be above those of the Sun and Mercury, because they do not all resist equally. This seems more evident than the reasoning of the ancients, who judged the Sun to be closest to the Moon because Venus or Mercury never entirely disappear from our view.

But this, too, is refuted in multiple ways: for what occurs with Mercury is due to its smallness, whereas in the case of Venus, it is because it is closest to the Sun and overwhelmed by its rays. Therefore, it cannot obstruct the descending rays as the more distant Moon can. Furthermore, perhaps their tenuous nature, unlike the Moon's dense and earthy body, does not resist the rays. Or perhaps they have their own light, which, when the Sun's is taken away, they regain instead of losing. Thus, the eclipse is not perceived.

Avenrodan, in his paraphrase of Ptolemy's *Almagest*, says he once noted two almost black spots on the Sun. When he arranged the calculations, he found Mercury was opposite the Sun's rays at that time. Therefore, Maimonides rightly declares, also with the testimony of Abubachesis, that the position and order of the planets is uncertain.

We know with certainty that the Moon is lower than all and is the threshold of the heavens, due to the greater diversity of its appearances, which necessarily indicates a smaller proportion of the Earth's semidiameter to the semidiameter of its sphere. But how the other three, Sun, Venus, and Mercury, are arranged in relation to one another remains uncertain. It is known these four stars are closer to us than the other three, but reason does not demonstrate the position and order.

Therefore, when astrologers rely on such an order, they rely on a principle both false, and uncertain. The same objection can be made regarding the signs, since (as we have sufficiently demonstrated) in the zodiac there is no order or four equal principles.

Having spoken of the first type of argumentation, they prove by parabolic similarity as follows: the tenth house is open at the lofty summit of the sky, while the fourth lies hidden in the depths of the Earth. Since knowledge about the mother is more certain to each person than about the father, it is fitting that the mother be judged by the tenth house, but the father by the fourth. This method is to be refuted in no other way than by its own designation.

Arguments drawn from these likenesses are not only unworthy of philosophers, but neither suitable nor useful for dialecticians, and not even convenient for the persuasions of rhetoricians. They present a vain poetic amusement rather than a proper and adequate authority.

Astrologers argue from mathematical principles when they turn what has been correctly determined by mathematicians towards their foolish predictions. Such as what we previously mentioned about the division of the zodiac into signs, the signs into parts, and the parts into minutes. Likewise, when certain signs are called straight and others oblique due to the unequal delays of their ascension, astrologers transfer this to the nature of straightness and obliqueness in motions.

They draw from astrological principles whenever they establish some astrological dogma as the foundation for confirming another dogma.

They use dialectical reasoning whenever they adopt certain common and probable propositions from nature or metaphysics. This is exceedingly rare. I do not remember having read among them any reasoning that would bring credibility to dialectical probability.

Chapter Five

The arguments drawn from parabolic similarity, by which astrologers prove the properties of the houses, are refuted.

We have spoken of these matters in general. Now let us recount individually the fabrications (more truly called thus than arguments) by which astrologers assert the properties of houses, beginning with those derived from the position and conditions of the signs.

The assignment of a house by parabolic similarity is made this way: the father loves his children, and the fifth house is connected by friendly radiation, because it forms a trine to the Ascendant. Therefore, the fifth house signifies children.

This manner of argumentation appears sound, yet is plainly ridiculous. Let us demonstrate by showing that what astrologers claim is not rightly inferred.

They say: the first house signifies the one being born himself, because he emerges from darkness into light. Likewise, the Ascendant. Behold the parabolic similarity!

For this reason, astrologers believe this same house represents short journeys, such as when one moves from one street of the same city to another, from the city to the suburbs, or from a dwelling to its outskirts. They claim the cause of these movements lies in the stars, which are foretold by the disposition of the first house, as Guido Bonatti says.

Let us examine whether the similarity holds in the remaining houses.

The property of the second house, they say, concerns wealth, because nothing is closer to a man. Therefore, since the second house is adjacent to the first, it will signify wealth.

This would indeed apply to those for whom nothing is more important than wealth. However, I would suggest many things are closer and more intimate to a man. The qualities of the mind and body, wisdom, and health. These should be signified by the second house, rather than by the sixth or the ninth. Moreover, among external things, parents, a wife, friends, children, and glory are preferable and closer than wealth. Except, of course, among that one kind of people who call themselves astrologers.

Also, why does the same house also signify letters, as Zael the Israelite says? Unless perhaps only in the nativities of scribes, who always have a stylus and writing tablets at hand?

Now let us proceed to the rest.

They wish the third house to indicate brothers and the fifth to indicate children. We have already given the reason why children are assigned here. The reasoning for brothers is similar, since the third house is connected to the Ascendant by a sextile aspect.

Since a sextile connection is friendly, but a trine is even better, the latter is given to children, whom we love more, while the former is given to brothers.

For the same reason, the eleventh house is assigned to friends, since the Ascendant also regards it with a sextile aspect.

But I ask: why does the ninth house not signify children as well, since it is also in a trine to the Ascendant?

Astrologers will answer that it is a cadent house.

So I ask again: is the third house better, or the eleventh? By the same reasoning, the eleventh should be preferred, since the third is cadent.

Why should the third not be the house of friends and the eleventh that of brothers? Unless, by overturning the order of nature, astrologers think friends should be preferred over brothers.

That matter of children is further troubled by another argument. Parents ought to be judged from the fourth house. But between the fourth and the Ascendant there is a square aspect, which is the greatest indication of enmity.

How, then, do astrologers associate the one being born, and his children, by a friendly radiation, yet at the same time connect him to his parents by an unfriendly one?

Furthermore, Ptolemy is favoured by all the Greeks and by Avenrodan, who says children should be judged from the tenth house, rather than from the fifth. Porphyry argues this is correct, because it is from there that souls are sent into bodies.

But we can set a fable of our own against the fables of Porphyry. For it is said souls descend through Cancer and ascend through Capricorn. However, Cancer is a northern sign, to which Ptolemy assigns the lowest part of the earth, not the highest.

Astrologers take omens for the prediction of children from both the fourth and the eleventh houses alike.

Alchabitius and the Hebrew Andragazar claim legates belong to the fifth house. Vettius Valens says it pertains to rumours and messages, and also fame which exists after death. Adia writes that it signifies clothing.

By what reasoning? They provide none.

It is highly unreasonable that they assign the sixth house, which astrologers call torpid, idle, inert, and ineffective, to servants. In reality the labour and industry of servants sustains the leisure and idleness of their masters.

But look at the most beautiful reasoning Avenrodan offers on this matter.

"The seventh house," he says, "signifies equals. But subjects are distanced from equals (these are his exact words) as much as the sixth house is distant from the seventh. Therefore, the sixth is assigned as the house of subjects."

Such nonsense should be laughed at, rather than refuted, lest we face reproach from Aristotle.

Regarding what they say about the seventh house signifying equals, see how they themselves consider it neither true nor consistent. For astrologers attribute to the same place the wife, partners, and open enemies. Nothing is more contradictory.

But Abraham the Jew defends this as follows:

"Since," he says, "the seventh house is opposed to the first, it signifies disputes and wars. Since it descends when the Ascendant descends, it signifies the wife. Because the duration of its descent is equal to the time of the first house's ascent, which bears some similarity, it signifies equals and partners."

Everything can easily be confirmed, since there is nothing that, by some resemblance, cannot be marked as both similar and dissimilar to anything else.

Where does this reasoning not fail? Indications of opposites are placed together as if they agree.

Astrologers will say they agree in this way: the times of rising in the east and setting in the west are equal.

This is well said if you also concede fire is similar to water, because water possesses as many degrees of coldness as fire has of heat. For descent and ascent are as much opposed (said with the utmost precision) as heat and coldness.

Is it not more certain that the wife pertains to the second house, as she is closest to the husband, always succeeding him as if an equal secondary to him? Especially since astrologers wish to assign one sign as male and another as female, because, as Ptolemy says, women adhere to men.

But let them justify why the same house signifies thieves and fugitives (as Vettius Valens thinks), and purchases and sales, and why others say it pertains to journeys of moderate length. Why does Guido Bonatti write that it signifies the worship of pure divinity and the foreknowledge of future events?

Death should be more rightly assigned to this house, rather than the eighth, since one descends from light into darkness, just as in the Ascendant one goes from darkness into light.

But, Ibn Ezra says, this was not accepted because it is somewhat similar to the Ascendant – by the very kind of similarity which proves water similar to fire.

Dorotheus also judges death from this house, rather than from the eighth, observing the ruler of the house for that purpose.

Let astrologers also answer why the eighth house signifies wars according to Albohali, and why Alchainil writes that it signifies stewardship. Others claim it pertains to usury, and that inheritances should be foreseen from the eighth as well.

I do not see how heirs and the deceased align. Better if the eighth house judged death, and for the ninth to signify inheritance, as it succeeds the eighth.

But astrologers assign inheritances to the eighth, says Ibn Ezra, because it corresponds proportionally to the second house, to which wealth pertains.

This, indeed, is that oft-ridiculed concordance of opposites. What similarity will there be between opposite houses except that of dissimilarity?

If astrologers always spoke of these things as if they were similar, perhaps the error could be forgiven. But they sometimes treat them as similar, sometimes as maximally dissimilar, and indeed as true opposites, all so that they may make their case.

Opposite places are taken as if they were the same. The second house foretells the things by which we are nourished and preserve our life, the eighth signifies death and exile. Yet, immediately afterwards, the same house signifies inheritances and wealth, as if it were similar and related to the second. When those who die make heirs, they do not become heirs themselves, unless we speak of the heavens, which are not subject to inheritance.

Other objections could be raised, but I fear that by refuting trifles, I may become a trifler myself.

One cannot, however, pass over what is said about the ninth house, for it offers the reader something to laugh at, relieving the tedium of verbosity.

The ninth house, astrologers say, signifies long journeys. Hear the reasoning! It is because when the Sun is placed in the tenth house, it moves downwards to the ninth. This

was written by Ibn Ezra in the first and second book of *The Book of Reasons*, where laughter is needed more than syllogisms. As if the Sun, when passing from one place to another, does not move in all houses.

And what of this? Since the Sun descends by that motion, I suppose the ninth place would not signify journeys in which we ascend mountains and elevated places.

Who cannot jest when disputing with absurdities?

Add also the fable concerning the twelfth house: that through it are signified beasts of burden, because it is joined to the Ascendant whenever the same sign extends through both places. Yet elsewhere astrologers say the twelfth house foretells darkness and prisons, because it is farthest from the Ascendant (since it is the twelfth from it).

Astrologers measure out whatever they please, with as little regard for truth as for consistency.

For if that house ought to be joined to the Ascendant whenever the same sign occupies both seats, and separated when the signs are different, it follows that the twelfth house does not always signify the animals we ride. Or prisons. Rather, it would never signify both at once. The former only when the same sign is in both places, and the latter when the signs are different. Yet no astrologer thinks this.

Chapter Six

Refutation of Haly Avenrodan's reasoning concerning the properties of the signs that are derived from their order and sequence.

These are arguments drawn from the position and condition of the houses by parabolic similarity.

Haly Avenrodan, in the first book of *Apotelesmata*, derives them from the order and sequence of the signs, so the first sign corresponds to the first house, the second to the second. The nature of the house is judged according to the nature of the corresponding sign.

Thus, brothers and short journeys are judged through the third house, since Gemini is also the third sign, whose ruler is Mercury. Likewise, he says Mercury has influence over mixed matters; therefore, it will signify brothers, and since it is always close to the Sun in its course, short journeys will pertain to it.

But neither any other astrologer, nor Ptolemy himself, whom Avenrodan follows, makes Mercury the significator of brothers.

Nor is there any reason why Mercury should preside over short journeys merely because it imitates the course of the Sun. If this were the case, because it revolves with swift motion, it would pertain no more to Mercury than to the Sun and Venus, whose courses are almost equal.

Let us come to the fourth house, to which Cancer corresponds. Avenrodan says it signifies the father because the Sun rules over fathers, and the Sun's power appears in Cancer. How vain and frivolous are these conjectures! In other cases, Avenrodan always uses the ruler of the house, but here he resorts to one who has neither domicile, nor trigon, nor decan.

Since neither the Moon, the ruler of the fourth house, nor Jupiter, the king of the Cancer sign, served the signification of fathers, Avenrodan turned to the Sun, because it heats the most when placed in Cancer. This does not arise from the nature of the sign but from the relationship of the Sun to the Earth. Else if we follow the principles of astrologers, what affinity does the Sun have with a humid, cold, feminine sign, in which it possesses no prerogative of dignity?

Since Saturn rules the same house, as Avenrodan also says, how will the Sun rule it? Astrologers consider the nature of Saturn and the Sun opposed and assign them opposite houses and domiciles. How does Avenrodan's conclusion align? The nature of Saturn corresponds to the fourth house, and therefore that house pertains to inheritances and hidden matters. Yet, when Cancer is discovered as the fourth sign, Saturn suffers exile, being far from its house.

Regarding the eighth and ninth houses, Avenrodan invents other false and contradictory claims.

"Scorpio," he says, "is the eighth sign, whose ruler is Mars, because it signifies death."

But not the flavour of death that Mars represents among astrologers; rather, it is Saturn's. For, as they say, Scorpio signifies poisons, decay, and inertia, as Albumasar states. The Greeks even call it *Argos*, which does not at all suit the nature of Mars.

The ninth house is attributed to Jupiter; the ninth sign is Sagittarius. For this reason, the ninth house is called the judge of religions and wisdom according to the nature of Jupiter. But by the same reasoning, why does the twelfth house, to which Pisces corresponds (also a house of Jupiter, just like Sagittarius) not hold the same status? Even if Sagittarius is more favourable for Jupiter, if the nature of the planet ruling a given sign corresponds to the nature of the house, the twelfth house should not be the most miserable of all, given that the assigned sign belongs to the most fortunate of all planets.

However, Avenrodan himself confirms the weakness of this method. Since he saw it does not hold in all cases, he applies it only to five houses. For the rest, he resorts to other explanations, which we refuted in the previous chapter.

We, in turn, have demonstrated that even in those five houses, his reasoning is not to be followed.

Chapter Seven

Against the explanations of the same properties Albumasar derives from the order of the planets.

Albumasar derives properties of the houses from the order of the planets. The first house is assigned to the first planet, the second to the second, the third to the third, and so on. According to the property of the planet, the property of the house then follows.

But a serious inconsistency arises: the same planet is assigned to houses that signify opposite things. Saturn to the first and the eighth, Jupiter to the ninth and the second, Venus to the fifth and the twelfth. The first house pertains to life, the eighth to death. How, then, can Saturn preside over both the first and the eighth?

After the seven planets have been assigned to seven houses, the cycle returns to the first, which is why Saturn falls upon the eighth, something all acknowledge. Likewise, the ninth place signifies faith, wisdom, and religion, while the second signifies wealth. Alas, God and Mammon do not agree.

Add to this what Albumasar states here, as in other places: that Jupiter signifies the happiness of the world to come, while the happiness of this world pertains to wealth. But since wealth belongs to the happiness of this world rather than the next, it will be signified more by Venus than by Jupiter. Wealth then should be referred not to the second house, which by number belongs to Jupiter, but to the fifth, assigned to Venus.

Astrologers themselves usually say that the houses of Jupiter and Mercury are opposites, since wisdom, whose author is Mercury, is opposed to Jupiter's dignities and riches. Thus they repel the accusation with which they are often assailed – namely, that through foresight of future events and the deduction of celestial virtues, as masters of nearly

all nature, they nevertheless often aid the poor and lowly. Astrologers accept it as the fate of the wise in this matter that they do not become rich, because Jupiter is opposed to Mercury.

How, then, do they make Jupiter the author of both wealth and wisdom alike?

In the case of Venus, the absurdity is even more evident, for just as she is assigned to the fifth house, so too does she fall upon the twelfth. One is said to be the place of joy and pleasure, the other the place of prisons, sorrow, and darkness. What could be more contradictory?

Some devise a most ingenious defence, saying that since repentance often follows pleasure, both houses must belong to Venus. That of joy and that of sorrow.

By the same reasoning, death follows life, so both must be signified by the same planet. No doubt they claim war and peace pertain equally to Mars, since peace always follows war, just as fair weather follows rain and rain follows fair weather.

But lest astrologers think they must always grieve beyond all joy in order that they may never grieve at some point, not every joy has grief as its companion, but only that beyond measure and reason. They will not call this signified by the fifth house, if, according to their principles, griefs belong to the fifth place (joined to the Ascendant, which signifies the life of the newborn). Excessive pleasure, whence comes repentance and pain, is not a nourishment of life but a destruction.

But we speak too seriously in refuting trifles. Let us consider Albumasar's reasoning concerning Mars, and we shall bring this to an end.

"Mars signifies brothers and sisters," he says, "because they have the same parents. The reasoning is as follows: Saturn is assigned to the first house, where the ruler of the nativity is judged. Therefore in the second house is Jupiter, the second planet, and in the third house Mars, as he is third in the order of the spheres. Mars and Saturn are of the same kind,

evil and harmful. Therefore, the third house signifies those of the same kind as the one who is born, and thus, brothers and sisters."

Haec noster Aboasar qui nisi scripsit ebrius, haec certe scripsit insanus. Thus speaks our Albumasar. Unless he scribbled this while in his cups, he certainly scrawled it while insane.

For who is more unlike among the planets than Mars and Saturn? One is fire, the other earth; one rages with heat, the other is numb with cold; one is nocturnal, the other diurnal. If you go through, you will find no influence of Mars that agrees with the influences of Saturn.

Moreover, since children are also like their parents, either they ought not to be signified by the fifth house, assigned to Venus, or Saturn agrees with Venus too.

We have recounted the arguments of the astrologers whereby they attempt to prove the properties of the houses (more liable to criticism because we examined too carefully rather than too little), arguments drawn from certain faint resemblances between things. But although easily refuted without much effort, they are still supported by the authority of tradition and the testimonies of ancient writers, and so must be denied rather than disregarded.

Chapter Eight

The Joys of the Planets fall with their houses.

The Joys of the Planets are similarly overturned, because this is denoted by the properties of the houses; astrologers wish each planet to rejoice in that house whose property is similar to the property of the planet.

Thus they assign Venus to the fifth house, because that house governs joys, children, and pleasures, just as Venus signifies. The other planets are assigned to other houses by the same reasoning, as can be understood from the third book of Ibn Ezra's *The Book of Reasons* and Albumasar's *Great Introduction*. Albeit, if we follow this path, the third or sixth house would be more suitable for Mercury than the Ascendant; and the Ascendant or the Descendant more suitable for the Moon than the third. The tenth house suits the Sun more than the ninth. The ninth suits Jupiter more, likewise the second more than the eleventh. The seventh suits Mars more than the sixth. The fourth suits Saturn more than the twelfth. Which anyone might notice by comparing the functions of the houses to the conditions of the planets.

Haly Abenragel says the parts of signs vary: some are hot and dry, others cold and moist, others cold and dry, others hot and moist, and others intermediate or mixed. Each planet is invigorated by the parts that match its nature. But the intermediate or mixed parts suit Mercury.

Ptolemy and others do not accept this reasoning. They want Venus hot and moist, and therefore the cold and moist parts of a sign would suit no planet.

Furthermore, Mars possesses only five parts in Aries. If Abenragel is correct, there will be only five hot and dry parts in Aries, and the remaining parts will belong to another condition, differing from the nature of the sign (determined to be hot and dry).

Similarly, there will be more airy parts than earthy in Taurus. So on with other signs.

Abenragel's reasoning is deceptive. Even if true, it does not resolve our question, since which parts of signs are hot, and which are cold, remains uncertain. It would not be certain which should properly belong to which planet.

Chapter Nine

Ptolemy's arguments concerning the planetary houses are hereby destroyed.

Now we must speak of the signs, about which we have already overturned many astrological arguments. That there are twelve signs, and neither more nor fewer. That the beginning of the signs is taken from Aries, and also the division into watery, earthy, fiery, and airy. That one sign is the exaltation of one planet, and another sign the exaltation of another.

There remain other matters, concerning the houses of the planets.

Even if an affinity exists between the planets and the various signs, even if a planet is weakened under one sign and stronger under another… the differences among these signs cannot be grasped by us, since this cannot happen except according to the nature of the stars and of the sign itself. But the nature of the stars is not demonstrated by reason. Therefore, the affinity of the signs with the stars remains undemonstrated. If instead the regions of the heavens affect the stars, a syllogism about hidden properties would be no less uncertain.

Ptolemy relies on only one argument regarding the houses of the Sun and Moon, but on three concerning the houses of the other planets. The first is taken from the nature of the signs; the second, from the proportion of the configuration to the houses of the luminaries; the third, from the number and succession of the spheres.

Let us examine the first of these. It is of this sort: Capricorn and Aquarius are wintry signs, because they are cold; Saturn, too, is a cold planet. Therefore, they suit him properly. The argument errs in many ways. First, because in the nature of the sign, one ought to consider what belongs to it in essence, rather than what is by accident. Coldness belongs to those signs by accident, for the sole reason that when the Sun is in them, it is the cause of accidental cold – that is, because it moves farther away from us. When a judgement is made about those signs according to their essential nature, one is earthy among the astrologers, the

other airy – a quality that suits Jupiter rather than Saturn, which, being cold and dry, is contrary to all the qualities of Aquarius.

Moreover, when astrologers assign things to the stars, they allocate to the malefics those signs that differ more in their nature than those which agree, so evil nature may be tempered by a contrary mixture. Thus, astrologers make Saturn diurnal and Mars nocturnal, although the cold night does not agree with the heat of Mars, nor the hot day with the chill of Saturn. Thereby the harmful quality of each may be restrained: fervour in Mars, torpor in Saturn. Let astrologers say, then, whether in assigning signs to a malefic planet, they also wish to follow the opinion (or rather method) they observe in defining diurnal and nocturnal.

Let us allow Ptolemy to hold different opinions in different places, provided he does not contradict himself in the same context.

If a sign consonant with the nature of Saturn makes Saturn's house, Aquarius is excluded; if dissonant, Capricorn is cast out. Ptolemy will say he refers to those qualities of the signs attributed to the effects of the Sun. But both Capricorn and Aquarius are counted as cold, which agrees with the quality of Saturn.

We contend this is done without reason. But let us grant it and not deny what Ptolemy thinks can be inferred. Perhaps this is the case with Saturn. Alas, it will not work for the other planets. For the houses of Venus are Libra and Taurus; Libra is an autumnal sign, dry and cold, just as Aquarius is cold because it is wintry. Therefore, Libra is opposed to Venus, defined by most as hot, and by all as moist. I am a little surprised at Ptolemy, who says these signs agree with Venus, since she is considered generative and especially fertile. This can be said of Taurus, but not of Libra.

Jupiter has nothing in common with Pisces and Sagittarius. For if the time of year is considered under these signs – one ends winter, the other ends autumn – one sign will oppose Jupiter by its coldness, the other by its dryness. Even the watery moisture of Pisces does not

agree with the vital moisture of Jupiter. Ptolemy refers to that kind of concord, and claims both signs produce winds and have generative power. Therefore Jupiter, as a temperate planet, agrees with them.

I refute these things, but would have considered the effort superfluous, had anyone other than Ptolemy (whose authority can easily impress the unskilled) presented them. Otherwise, this is the sort of silliness that the learned, joking and playing among themselves, are accustomed to say. 'Winds are stirred up, therefore the signs are similar to Jupiter.'

Avenrodan supplies the reason: Jupiter presides over the generation of living things, and over females, whose vapours and exhalations are somewhat similar to winds. O marvellous wisdom, by which even moist things can be defended as similar to the dry!

The philosophers (unless I am mistaken) invariably make winds dry, contrary to all generation, which is moist. But astrologers call signs fertile, because when the Sun is placed in them, women conceive. If only this could have been applied to human seed, it would certainly have suited better than Aries. But astrologers could have given to Jupiter what Mars occupies entirely unjustly. What has Mars to do with the beginning of spring? No heat of his afflicts that time, and the generative and fruitful moisture shares nothing with Mars' scorched dryness. With equal boldness Mars has invaded Scorpio, also without right – Scorpio is a cold and autumnal sign.

Therefore, if we follow this reasoning, the division of the planetary houses would not have been fair. Let us examine the others arguments, those taken from the configurations of the luminaries and from the number of spheres. But since they are derived from proportion relative to the luminaries, let them be set forth.

Ptolemy offers: Cancer and Leo of the twelve signs lean most towards the north and come nearest to the tops of our heads. Therefore, those signs are given to the two greatest and

principal stars, the luminaries. Leo to the Sun because it is a masculine sign, Cancer to the Moon because it is feminine.

First, this is assumption is false. The signs nearest to us are Cancer and Gemini, not Cancer and Leo. Even were it true, what reasoning teaches that the nearer signs are more fitting for the greater stars? The ancients might have invoked similarity, because the Moon is nearest to us among the planets. But Ptolemy cannot say that, since he makes the Sun the middle of all the planets. Or was it done because in Leo the Sun heats more?

It has been said, more than once, that this happens from position on the Earth, not from the property of the sign, so in other nations the Sun does in Libra what it does for us in Leo. But if the powers of the other stars vary after the manner of the heat of the Sun, we would experience the same for those others as for the Sun. That is, we are more affected by those approaching Leo, though they are found in other signs far from us.

Does the Sun agree with Leo for similar reasons? It is hot and dry, and also masculine. This is not proper to Leo, but is common to Aries and Sagittarius.

There remains one condition, which that most serious author Albumasar mentions. He says just as the Sun is the middle of the planets, so Leo is the middle sign of summer. Were it not for this reasoning, I would not have granted that Phoebus should dwell in Leo more than in the other beasts of the sky.

But Albumasar persuades me (truly, he is the protector and sweet ornament of astrologers). The one who also devised a most beautiful idea about the Moon's relationship with Taurus. Ptolemy had made the argument based on distance: that among the signs nearest to us, it is a feminine one. Not content with this, Albumasar added another argument: that the Moon signifies beginnings, and Cancer is the beginning of summer. Who would not grant this demonstration?

Avenrodan did not see this, and uses a different reasoning: that the house of the Moon ought to be next to that of the Sun, because the Moon always follows the Sun. But this is said more rightly of Venus and Mercury, whose houses nature has also made adjacent to the Sun, if we believe Ptolemy. The same Ptolemy whose interpreter is Avenrodan.

But let these be the houses of the luminaries. As for the distribution of the others, Ptolemy provides the following reasoning: that the houses of the malefics, Mars and Saturn, should gaze with hostile rays upon the houses of the luminaries; but the houses of benefics, Jupiter and Venus, should be friendly, with Mercury placed nearest to them.

Therefore, it was right that Scorpio and Aries were given to Mars, being in square aspect to Cancer and Leo; Capricorn and Aquarius to Saturn, being opposite them; to Jupiter, the trine signs Pisces and Sagittarius; to Venus, the sextile signs Libra and Taurus; and to Mercury, the nearby signs Gemini and Virgo.

The assumption is untrue, nor is the conclusion rightly inferred from the assumptions. We reasonably say a house is established if a planet fares well when placed there. But the square aspect of Mars and of the Sun is harmful, as is likewise the opposition of Saturn, both because of the adversity of the opposition and because of retrogradation.

Moreover, Ptolemy himself declares all planets fortunate at the distance from the Sun at which their houses are distant from the houses of the Sun, which the Arabs *almugea*. It then follows that Saturn in opposition to the luminaries, and Mars in a square, would be fortunate, contrary to the opinion of all astrologers, who decree great misfortunes and calamities from such configurations.

It is evident that the principle from which the conclusion is drawn does not hold. For when astrologers say these or those houses are trine or square to other houses, they take them so that they are compared to Leo. The signs between Leo and Capricorn are considered consequent in one direction, and those between Cancer and Aquarius in the opposite order.

Hence, one is called the domain and rulership of the Sun, the other of the Moon. Otherwise, the houses of Venus could be called both square and trine, since Libra is square to Cancer, and Aries to Leo.

Therefore, the house of each luminary must be compared with a collateral house, as though placed under the dominion of the same star. But if this is done, it will be found that the houses of Saturn are not opposed to the luminaries, since Aquarius is not opposed to Cancer, nor Capricorn to Leo. Hence, no one can say the houses of Saturn stand opposite the luminaries, merely because they occupy the sixth place from the Sun or the eighth from the Moon, a fact Haly Avenrodan also acknowledges.

Another reasoning is taken from the order of the spheres: when Leo and Cancer were assigned, the nearest houses were assigned to the planets nearest the Sun and Moon. Thus astrologers give Mercury Gemini on one side, Virgo on the other; then to Venus the next; then to Mars; next to Jupiter; and lastly to Saturn. But we have shown that all these arguments, drawn from the consequential order of the spheres, are false. Even if they were true, they would remain uncertain.

Therefore, Ibn Ezra rightly says in the second book of *The Book of Reasons*: “I searched in the books of the wise for the reasons behind the signs and houses. I found nothing good; the doctrines rely only on the authority of experience.”

In this book, we shall weaken those reasons; in the next, the experiences of the astrologers.

Chapter Ten

The reasons for the faces and bounds have already been rejected.

The faces of the planets, which all astrologers use, are likewise divided from the consequential order of the spheres. They assign the first parts of Aries to the ruler of the house, and the following parts to the following planets, according to the order of motion and the spheres. The first to the Sun, following from Mars, the second to Venus, and so on thereafter. The Indians gave the first parts to the ruler of the house, the other two to the rulers of the signs of the same triplicity. We have sufficiently refuted the triplicities and those arguments which rely on the number of the spheres, so there is no need for new arguments.

As for the bounds, there is so little agreement that five opinions have been rendered about them. The reasoning of each criticises and ridicules the others. Indeed, they are all so weak that each changes its neighbours by some new right and invades the territory of others. The Chaldeans ordered their bounds from the order of the triplicities, so that the triplicity signs might likewise be divided. The method of partition would be that the ruler of the triplicity occupies the first parts, then the following ones go to those that follow, up to four. The Egyptians (which Ptolemy charges against them) follow no fixed method or rule. Now they follow triplicities, now rulers, now 'fathers of the household.' Sometimes they start from those stars which have no authority in the sign, as Mercury in Capricorn.

Ptolemy approves another division, the reasoning behind which is in the first book of the *Apotelesmata*. It depends on the rulers of the house, exaltation, and triplicity. Ptolemy ought not to have approved this, unless he wished to refute himself, since the author of the division prefers exaltation to triplicity, and triplicity to house. Ptolemy, however, prefers the house above all, and places exaltation last, which in this division is placed before all others.

The Indians divide the masculine signs similarly throughout, and likewise the feminine ones, but no reason is understood for either. Asotol gave bounds also to the luminaries, the same number of parts to each planet, the first to the ruler of the house in accordance with the order of the prophets, the rest to the others.

But we have already undermined the foundation of this doctrine, and likewise the houses, exaltations, and triplicities. At the very least we have shown them uncertain. The whole reasoning for defining bounds therefore collapses (if bounds are to be conceded at all). Moreover, even if the truth about triplicities, houses, and exaltations were definitively established, we still could not determine how bounds should be decided. Whence the variety of opinions, because one thing seems more probable than another to different people.

Chapter Eleven

Which sign rules which limb is determined in various ways. All with little reason.

Astrologers assign the head to Aries, the neck to Taurus, and similar limbs to the other signs. They derive this from that oft-ridiculed numerical order, that the first sign is assigned to the first part of the body, the second to the second, the third to the third. Yet even in this partition they err. Not because they make Aries the first of the signs (a matter uncertain, or rather entirely false), but because no reasoning justifies so many parts of the body. Aristotle identifies seven, Nicomachus ten. Why do astrologers assign twelve? Let them give a reason. They indeed consider it rather absurd to combine the shoulders, arms, and hands into one part subject to a single sign, and likewise the feet with the shins, the shins with the knees, and the knees with the thighs, so that the four great parts should be subjected to four signs.

In making such a distribution, better to compare hot parts with hot, cold with cold, rather than second to second, third to third. This commonality of nature is better observed than the enumeration of position and order. Nor perhaps would those who assign the feet to Pisces be mocked – Pisces being the only one among the celestial signs to lack feet.

Let physicians beware futile doctrine. They should not fear to cut the vein of the arms, if the matter demands it, merely because the Moon is passing through Gemini (Gemini is said to rule the arms). Nor should they delay a healing remedy, led by empty superstition.

Neither Hippocrates, nor Galen, nor Avicenna, nor Paul of Alexandria, nor Oribasius… none of these resorted to such nonsense, or established it for others to follow. Nor have those who, in our own time, have practiced the medical art successfully and prudently.

Therefore, let every kind of insane superstition of this sort cease. If such doctrines are proven to have no reasoning, they can also have no strength of experience. First, because no truth agrees with a lie. Second, because we will demonstrate many things on this matter in the next book. Finally, on account of the mutual contradiction of those who promote these things.

Ibn Ezra assigns the testicles to Sagittarius; Albumasar assigns them to Scorpio; Alchabitius assigns the diaphragm (called the *septum transversum* in Latin) to Virgo; Porphyry assigns it to Leo (to which he also gives the belly, which the Arabs assign to Virgo). Some give the knees to Sagittarius, which the Arabs and Latins assign to Capricorn. Heliazer Garnozensis, a Hebrew man, in his book *De Anima*, assigns the hands and feet to Cancer, though others assign the hands to Gemini, and the feet to Pisces. Heliazer also assigns the legs and feet to Libra, but on a different basis than with Cancer – he assigns them to Cancer insofar as they perform the function of walking, and to Libra because of the resemblance (when walking one lifts and lowers the feet like a balance).

Others assign no such thing to Libra, but the legs to Aquarius and the feet to Pisces. To Libra, they assign the buttocks, kidneys, and loins. Heliazer says the gallbladder corresponds to Scorpio, and the genitals to Sagittarius. Others give the genitals to Scorpio.

Astrologers have observed it is never safe to apply iron to a limb whose sign the Moon occupies at that time. Given such great uncertainty about which sign a limb is assigned

to, no constant or agreed experiment can be had. It may sometimes happen, yet a wise man has observed the opposite. For Nicholas Oresme writes, as a serious philosopher and mathematician, that he has often seen bloodletting done beneficially in the foot when the Moon was in Pisces. Likewise in the arms when the Moon was passing through Gemini.

Chapter Twelve

The arguments of the astrologers concerning properties fitting to the signs. The arguments are refuted.

We have spoken of the properties through which the signs are assigned to us and to the planets. There remain those properties pertaining to the signs simply and absolutely.

Astrologers derive these from a threefold kind of proof.

The first is drawn from the affinity with the planets. This has already been refuted. The second is drawn from the figure of the animal of the same name. The third is drawn from those things the Sun performs when placed in a given sign.

With planetary affinity, astrologers argue the nature of the sign reflects the planet that rules that sign. When they say Aries signifies the hiding-places of thieves and wicked men, it is because Aries is the house of Mars, who signifies that kind of deviant.

From the labour of the Sun, they define signs as movable, fixed, or common, based on whether the Sun changes the season of the year, or confirms it as fixed, or moderates it with mixed quality.

From the figure, astrologers say some signs inspire gentle manners, others wild ones, in those being born. This is because some signs bear the image of men, such as Aquarius, Gemini, Virgo; others that of beasts, such as Leo, Taurus, Capricorn. Likewise, they call some signs beautiful, others deformed. They call beautiful whatever is under the form of humans

(except for Aquarius, because it is the dwelling of Saturn, the old man. As if an old man, even if deformed, could neither need nor delight in a beautiful dwelling). Likewise, those signs of brute form, Taurus and similar, they call 'semi-vocal'. They call 'vocal' those which have a human form, and 'mute' those which resemble aquatic creatures, since such living things are thought to lack a voice. The aquatic creatures are said to possess abundant offspring, while those of human form are sterile.

The rest astrologers place in a condition of medium quality, according to the nature of the living creatures whose images the signs are believed to represent.

These modes of interpretation are sufficiently vanquished above. For when astrologers form conjectures from the domiciles and natures of planets, they argue from astrological principles, which we have refuted.

When they argue from the labour of the Sun, we have shown how greatly they are either deceiving or deceived. It is not from nature, but rather from the position and distance to the Earth that the Sun acts in such manner. Furthermore, their conjecture transfers, most deceitfully, the seasons of the year and the changes of the air to other matters. Because Aries is a movable sign and the time changes, astrologers claim the character of one born under it is also movable, not persevering, more suited to beginnings than to completions.

Nor do astrologers err merely in turning the seasons into assertions of events and dispositions. Even in the very changes of the air it is thought what is observed in the Sun occurs in the other planets. Because the Sun in Aries, making the vernal equinox, arouses lightning and stirs thunder, they argue the Moon in Aries should do the same.

Indeed, they refer all their errors to the nature of the sign, which arises from the Sun's various positions. We have spoken abundantly in Book Eight about the figures of the constellations, how they are none, how empty, how fictitious – not the work of God but of men, not arising from the reason of nature but forged by the reckless imagination of poets.

Nowhere are astrologers more false than when they derive the properties of the signs from those poetic images, since even in the eighth sphere the images differ. Not only in position and movement, but also in the division and quantity of their parts, and in the dimension of what moves.

Finally, with intellectual sluggishness, triviality, and dullness, astrologers lazily contradict themselves, since they seek the condition of the same signs from both the Sun's activity and the image. From general agreement, the former suits the fixed signs, and the latter the movable ones.

Chapter Thirteen

Ptolemy speaks about the planets as if they were composed of the elements. The arguments of others on the qualities of the planets are likewise refuted.

Thus far we have dealt with the theories of the signs, and their notable irrationality. In the case of the planets, the same falsity appears. Indeed, it is a greater falsity, adorned with even greater recklessness.

Ptolemy philosophises poorly about the wandering stars and the nature of the planets. As though these celestial bodies consist of the four elements, or possess the qualities of the elements, being changed by heat or cold, or even the vapours of the Earth.

Thus speaks Ptolemy:

"The Moon is moist, because it is closest to the Earth. As vapours ascend to it from the Earth, it becomes moistened. The star of Saturn is cold, and moderately dry. Cold because it is placed far from the Sun, and it dries out because it is raised high above the mists of the Earth. Mars is scorched by the nearness of the Sun, and so is dry. Jupiter, between the chill of Saturn and the heat of Mars, is temperate. Because it moves above the hot spheres of Mars

and the Sun, it possess a power of heat. Venus is moist as the Moon, for by the abundance of its light it attracts vapours from the Earth. From the nearby Sun, Venus also has the power of heating. From the Sun, to which it always clings, Mercury has the property of drying, and from its nearness to the Earth and its closeness to the Moon, it has moistening powers."

So reasons Ptolemy in the first book of the *Apotelesmata*. If he cannot be persuaded by the Peripatetics that the heavens are free from such affections, at least let him comprehend those things he himself has demonstrated. The Earth is so far from the Moon, it would be impossible for the vapours and exhalations of Earth to reach it. Philosophers think such vapours are not lifted more than ten stadia above the Earth, and can hardly reach the Moon, Venus, or Mercury intact.

Venus, because of her nearness to the Sun, should be dry, rather than moist from the mists of the Earth (she is more joined to the Sun than to the Earth. Nor can the power of the Sun be compared with the moisture of the Earth). Mercury, closer to the Earth and therefore farther from the Sun, is nonetheless considered more dry than moist.

How does Ptolemy remain consistent with himself? He attributes humidity to Venus by comparison with the Moon, and yet the nearby fire warms the Moon so little she is considered cold by many. If Saturn freezes far from the Sun, would not the whole multitude of fixed stars, even farther from the Sun, be stiffened by the ice of cold? Yet Ptolemy declares many fixed stars of a fiery nature. Therefore, Ptolemy's reasoning is not only false but also inconsistent, a common affliction in falsehoods.

Others argue from the colours of the planets, which Ptolemy touches on with regards to Mars. These people claim philosophers err, when the latter suppose the elements partake of neither colour nor taste. They instead claim water possesses a white colour, and sweetness among the tastes; earth, a dusky colour and a bitter taste. Others assert it is sweet, and that if

it were bitter, the Earth would produce nothing. In fire, there is no taste, and a red hue. Air is devoid of colour and taste, though admits accidental colours.

In the planets, astrologers say there are no tastes, but there are multiple colours, whence we can easily discern their natures. The ashen colour in Saturn shows an earthy property and agrees with black bile. In Mars, the redness gives evidence of a fiery quality and red bile. Venus, gleaming in saffron and white, is understood to be warm from the saffron colour, moist from the white (since they are not equal qualities, this indicates a temperate nature, like the condition of air and blood. A similar conjecture is made about Jupiter). In the Moon, its whiteness indicates moistness. The fact it has something of an ashen hue shows it is cold. Mercury's colour is said to change repeatedly, appearing now green, now dusky, now turning to another appearance. It is said to favour dusky more, and therefore conformity with earthly dryness.

This is the reasoning of astrologers, very far from reason, for they trace the colours of the elements to mixture, which does not exist in the heavens. Nor are heavenly bodies said by Aristotle to partake in colour, except insofar as light is a colour. Nor, if colour indicates some property of a mixture, will light indicate the nature of a shining body, since any conjecture derives from colour, which is thought to emerge according to the diversity of matter.

Since colour is nothing other than the appearance of light, more or less bright, proceeding not from a composite but from a simple body, it gives no indication of the nature of the body emitting the light. Besides, no certain method of investigating celestial bodies from their colours would exist for us, even if they were endowed with true colours, owing to the vast intervening space. That space obstructs all the more, and its multiform nature utterly takes away the trustworthiness of colour.

I might cite Plato, writing in the *Phaedo*, where he says it is not the bodies of the stars we see, but certain reflections of their rays in the air, presenting a similar appearance, just as

fish living in the deep see on the surface of the water not the stars themselves, but images. Or, as I might say, radiant shadows.

But whether it is shadows, or the stars themselves we gaze upon, no one initiated in sacred philosophy is unaware that colours vary in a wondrous way, and seem to do so through the intervention of various kinds of bodies.

It is a matter of doubt among physicians whether, as Galen thinks, the powers and properties of herbs can be known from odour, colour, taste, and touch; this notion is much-argued against by Averroes and by experiments. No one has suggested we can obtain this knowledge from colour alone – a knowledge of things under our eyes, which we can observe for whole days, with neither motion nor space nor abundance of light interrupting the diligence and study of the observer.

Who, then, would dare to promise this concerning the heavens?

It is likely the colours of those bodies are reported to us as mixed, not pure or sincere. The whiteness of lime is scarce surpassed by that of snow, although in lime there is much heat, and in snow much cold. But Averroes is altogether mistaken (and most shamelessly so) when he believes we are deceived by colour in earthly things, but not in heavenly things, because the former are mixed from the elements, and the latter not.

Indeed, this very point means we cannot conclude the nature of celestial things from colour. Celestial bodies are not mixed from the elements, while colour only indicates the nature of a body insofar as it reveals to us the mode of its mixture.

Furthermore, the great multitude of celestial bodies are interposed over a vast region, This would distort and interfere with whatever colours may be imagined there, something demonstrated by the very diversity of opinions concerning those colours.

Albumasar denies the colours of the planets are as we have recounted above, as believed by those who judge the stars by their hue. He says the star of Saturn bears a leaden

colour, rather than the ash of earth; that there is no whiteness in Jupiter; nor is brightness proper to Venus.

If Mars is called hot because he is red, red heat should be even more attributed to the Sun, which is hotter than Mars. No one, unless lacking eyes, thinks the Moon is anything but white. Nor are the ancient natural histories entirely consistent as to planetary colour: Saturn is said to be white, Jupiter bright, Venus shining white as the Morning Star, or gleaming as the Evening Star. Mercury is described as radiant, the Moon as a gentle colour.

The claim about Mercury changing colour is the source of the mistaken notion that Mercury is multiform and mutable. This phenomenon does not occur because of Mercury's nature, but because the Sun, always nearby, is generally close to the horizon, in that part of the sky where (as Ptolemy attests) vapours and earthly humidities deceive appearances and vary the colours of the stars.

Therefore, says Albumasar, none of these colour theories has the credibility of probability – yet upon such things, the edifice of astrology depends.

Albumasar himself, rejecting the aforementioned arguments, thinks the nature of the planets can be known from the primary qualities these bodies produce (a point also noted by Ptolemy). Saturn is discovered by experience to be the author of cold and dryness, for these qualities prevail when he is the ruler of the year. Similar phenomena have been observed concerning Mars and the others, regarding what elemental affection each planet imparts.

From this, the entire nature of a planet is conjectured. Since cold and dryness, the works of Saturn, are contrary to life, the star Saturn is deemed malefic and unfortunate. Mars is likewise malefic, on account of burning heat and excessive dryness. Jupiter and Venus are considered benefic stars, because they possess the nature of heat and moisture, qualities whence life is preserved. Thus Albumasar argues in other cases.

Referring everything to those four qualities – cold, moisture, heat, and dryness – this reasoning depends on experiments. Saturn being an agent of cold rather than heat is not proven by reasoning (which Albumasar attempts to refute), but rather appeals to experience and the evidence of the senses. This is a conclusion many philosophers consider utterly false, for they assert that no star is a producer of cold and dryness. Even were it settled which star is the artificer of which quality, this remains uncertain with the Moon and Venus. Haly Abenragel and Alchabitius regard Venus as cold. Albumasar, with Ptolemy, thinks her warm. Ptolemy deems the Moon warm, while the rest of the astrologers say she is cold. About Mercury, they likewise do not agree.

If observation is made concerning the planet that rules the year (as Albumasar wishes), how can astrologers even agree on the experiment, since there is such great diversity of opinion in choosing the lord of the year? There are nearly as many planetary rulers of the future as there are astrologers making the predictions!

Chapter Fourteen

If we concede that the planets produce the primary qualities, it must not on that account be conceded that some are harmful and others beneficial.

Suppose a hypothetical. Led by the results of empirical experiments or by primary arguments, let us charitably concede what astrologers say about qualities. All that is then achieved is that the influence of the stars is now evident in altering the condition of the air (not of bodies), through such primary affections. Our astrologers have not even demonstrated that some stars are beneficial and others harmful. Nor can it be concluded what the proper and peculiar qualities of the stars even are.

If the star of Saturn represents the nature of earth, and Mars that of fire, why should one or the other be evil? Neither earth nor fire is evil, and from them arise innumerable uses for life, without which nature could not persist. In the bodies of living beings, black and red bile are not harmful but necessary, and no less useful for undertaking certain functions than blood or phlegm. They harm in excess, but blood and phlegm are similarly harmful, should they also increase beyond measure.

If a particular order (or principle) of the world – which we call man – is rightly traced from the universal world, it is unjust to blame the stars for the excess of any quality in the human body.

The fact the elements remain within their bounds and (confined by prescribed law) do not trouble the order of the world, is due to celestial nature, which governs and moderates the mutable and errant matter of corruptible things. By the same reasoning, why should it not be the role of the heavens to restrain and curb the qualities in our body in the interests of life – qualities which, if one be excessive, destroys the others and overthrows the whole?

Nothing proceeds from the heavens that is not ordered and life-giving, so if Saturn presides over black bile, the star will not rouse the bile to the ruin of the living being, but moderate it for preservation. Nor will black bile receive from its star power to act more forcefully and violently, but only to act more moderately and vitally.

The matter of bodily substances is a certain mixture of elements; the efficient cause is the heavens, but it is an efficient cause that draws together what is mixed and tempers all things under the peace of a single communion. One star moves one thing in one part of the heavens, but if these things are subject to different stars, the heavens together conspires harmoniously to the unity of the whole.

Therefore, let no one be deceived so that, having heard Saturn is set over red bile [sic], he believes the star produces anything in its subject quality that does not agree with

order and with life. The office of celestial governance must be understood to restrain what is unruly as much as arousing what is sluggish.

Nor does death come from the heavens but from nature, when each quality so degenerates it cannot endure the discipline of its governing star, but either rages forth unrestrained or, being weakened, fails.

I have warned the reader. Astrology is not a profession but rather an injustice to the heavens, for this superstition imputes everything we do contrary to reason (really the fault of the will), and everything that happens in nature contrary to order (really the fault of reckless and unstable matter), and attributes it to the stars. Nor does astrology think the dignity of those stars can be preserved unless we ascribe even the most unworthy things to them.

Let this conclusion be drawn: the four qualities do not harm bodies but benefit them, when moderate and tempered. They do not come from the stars in any other way. It cannot be said that because they come from the stars, the stars themselves are harmful.

In the first place, neither Mars nor Saturn can be called evil on the grounds that the former arouses red bile and the latter black bile in bodies. Neither red bile nor black bile is harmful to life, if it does not exceed its limits and measure. Indeed, each is necessary. Far from the heavens causing harmful excess, such excess is restrained within prescribed measure. Of this, we have spoken at length in Book Three, where we proved that bodily evils do not descend from the heavens.

If the heavens indeed strengthened such qualities beyond measure, not even Mars and Saturn would be evil planets for everyone. For some, excesses might prove beneficial. Cold seed might be tempered by the hot rays of Mars, and that which overheats brought back to balance by Saturn's coldness.

Therefore, an astrologer cannot judge someone will suffer the ailments of black bile merely because Saturn appears most powerful in their nativity. Nor can he pronounce that one

especially influenced by Mars will prove prone to choleric fevers, unless nature assigns such constitutions to those individuals, or unless he ascertains it through experience.

Since the astrologer neither knows nor investigates this, but only judges good or bad fortune from excesses of qualities, it is clear he will always remain in uncertainty.

It is likewise evident that a fortunate planet is sometimes unfortunate, and an unfortunate a fortunate one. Jupiter sometimes harms and Saturn benefits, and this happens according to the condition of material, not because of houses, distances, and signs. If these were indeed the cause of such changes, astrologers would still err most grievously, since here they maintain a position based on the primary qualities!

For Mars, as it heats more in Aries, should also harm more, something which astrologers themselves deny. They say: “Mars does not overturn his own house,” and universally any star that possesses either its own house, or exaltation, or elevation is deemed fortunate.

Yet who doubts that Mars heats more in Aries? Aries, as they claim, is a fiery sign. Similarly, Saturn in Capricorn would be harmful, and in Aries would be thought fortunate (against astrological opinion), since Saturn’s baleful cold and dryness are intensified in Capricorn, whereas the heat of Aries would temper that chill.

Indeed, Saturn should be more fortunate when it retrogrades (something astrologers do not believe) than when the planet moves in direct course, because, as Al-Kindi says, Saturn heats more when he retrogrades.

By the same reasoning, Mercury in Virgo harms us through excessive dryness, and the heat of the Sun, compounded by the heat of Leo, assails us more violently than is fitting. But the Sun should affect us more moderately, and beneficially, if its ray is tempered and diffused through the admixture of a cold sign.

Thus, this doctrine concerning the primary qualities, taken in so many ways, not only contradicts the truth, but also the very dogmas of the astrologers.

Beyond what we have said, we might make other objections. For example, why no one star clearly rules over phlegm, as Saturn rules over black bile, Mars over red bile, and Jupiter over blood. If astrologers say the Moon or Venus rules over phlegm, Venus or the Moon must then be counted among the unfortunate planets, since an excess of phlegm harms life no less than black bile or red bile.

Moreover, if the Moon is such as Ptolemy defines it, it must be an ill-fated star indeed. For it is of little heat, but of much moisture. With such temperament nothing is more prone to putrefaction.

If a planet is judged harmful or beneficial based on the influence of its primary quality, the Moon would be harmful, as it represents the cause of a dissolving and corrupting mixture. Certainly far more harmful than Mars and Saturn, who, even if they do not infuse the best natural qualities, at least infuse ones that only harm when immoderate. But what proceeds from the Moon is immoderate by its very nature, because of the weakness of its heat and the flowing moisture, which is neither sufficiently boiled [*cocto*] nor sufficiently condensed [*coacto*].

Nevertheless, Ptolemy numbers the Moon among the fortunate stars, relying on the authority of the ancients, and Albumasar even contends that it is more fortunate than Jupiter.

I would also gladly inquire: since the Sun is hotter than Mars, and has dryness added to that, why is Mars deemed more unfortunate, while the Sun is considered the foremost among the fortunate stars?

For thus does Albumasar define it, placing the Sun in the chief place among the authors of good fortune, the Moon second, Jupiter third, Venus fourth, Mercury fifth (here he seems to contradict himself, since he wishes Mercury to be dry and to partake more of the

nature of earth than of the others). If Albumasar were to follow his own principles, he ought to number Mercury among the harmful stars.

Others authorities disagree among themselves. A great number assign the Moon, the Sun, and Mercury to a middle rank, between the malefics and the benefics. As we have seen, Albumasar makes all three beneficent. Heliodorus and Paul of Alexandria count Mercury among the benefics. Ptolemy considers the Moon beneficent, but makes Mercury and the Sun of a middling condition.

Even this disagreement among astrologers undermines their opinion and clearly reveals the uncertainty of the art.

Moreover, if those suppositions about the primary qualities are true, it follows that of the twelve celestial signs, six are inauspicious and bring misfortune (all the fiery and earthly ones), since they abound in those qualities which condemn Mars and Saturn to the rank of malefics. In fact, nine rather than six would be inauspicious, since the watery signs, along with coldness, possess (as astrologers think) a destructive moistness, not of the kind belonging to the airy signs, or as is found in Jupiter or Venus (that is, vital and prolific), but rather a watery and fluctuating sort.

This is absurd for two reasons.

First, because the heavens, first of all bodies and especially beneficent, will have a majority of their signs condemned. Second, because inauspicious signs will be the houses of beneficent stars, as Pisces and Sagittarius are for Jupiter, and Taurus for Venus, though these ought to be distributed according to their kinship of nature.

Moreover, if astrologers call planets ‘fortunate’ and ‘unfortunate’ because vital primary qualities proceed from the former, and corruptive and harmful ones from the latter… even if we consider this with all charity, astrologers can merely show ‘fortune’ or ‘misfortune’ pertains to the bodily constitution, which is composed and tempered from those

primary qualities. But how will they defend the idea that fortune extends to external and chance events? Perhaps they might raise those utterly weak arguments we have already mentioned.

Lastly, suppose all we have said thus far is nonsense. It is still ill-considered and ill-advised to explain the influences of the stars by means of primary qualities alone. And yet, every astrologer does this. Those who boast of grounding their art's dogmas in natural causes? There is not a single one who does not find refuge in these elemental affections.

In truth, if there are proper and particular influences of the stars, these do not follow such qualities, but rather the hidden and truly celestial properties of each individual star. To these properties, people refer whatever earthly things seem to raise themselves above elemental nature but beneath the limits of the body. Here we see many gifts and virtues, ones not arising from the mixture of elemental qualities, but actually disagreeing with it.

Myrobalan fruits, with their cold and dry temperament, seem to contribute more to death than to life, yet their efficacy (by privilege of a secret nature) are believed wondrous for prolonging and invigorating life. Much more must Jupiter and Saturn and every higher nature, if what astrologers suppose is true, exert influence upon us. Even if the one planet is reckoned cold and dry, the other hot and moist… many significant things arise not through these qualities, but through other hidden powers of their rays.

This better suits their nature. The works attributed to them by astrologers (as we have shown) cannot be referred to the cited qualities and affections. Nor can these powers be detected by reason, which we have undertaken to prove.

There remains the path of experience, about which there will be extended discussion in the following book.

Chapter Fifteen

The arguments of astrologers concerning the rulers of days and hours, and the years of the planets, are ineffective. Astrologers often make use of circular reasoning.

We have refuted every method by which astrologers seek to prove the universal properties of the planets, whether from the positions of the spheres and the situation of the Earth, or from the colours of the stars, or from the influence of the four primary qualities. There remain arguments by which astrologers gather certain particular conditions of the planets. These are derived either from parabolic similarity, or from astrological considerations, or from the order of the spheres.

From the spheres, in the dominion of days and hours: granting the first hour of the day, for the sake of example, to the Sun, they assign the remaining hours to the other planets, which then follow according to the position of the spheres. Hence the distribution of the days arises, such that the day is assigned to that planet to whom the first hour happens to fall, once the division of hours has been made.

These things were thoroughly refuted earlier, when we showed the futility of that mode of reasoning, and how it rests on the uncertainty of the order of the orbs (which astrologers vainly imagine as a succession of rule). Beyond this, we may also inquire: how did the Chaldeans and Egyptians, authors of this superstition, determine the first day of all time? Astrologers cannot cite the authority of the Mosaic law, unless they believe that they themselves, along with every diviner, ought to suffer utter extermination by that very law.

They reason from astrological grounds when they say some planet grants as many years of life as it possesses bounds in the zodiac.

What is taken from the bounds is uncertain, and lacking in proof for one who seeks to derive something concerning the years of life. Even if what astrologers say concerning the

bounds were true, there is, according to the authority of Ptolemy himself, no rational way the spans of our life may be determined through such means.

Moreover, astrologers often err in these matters, arguing through circular reasoning, when they derive in one place the number of bounds from the number of years, and in another the years from the bounds.

They begin the year from Aries, first of the signs, though they deem it first in the continuous circle on the grounds that we begin reckoning time from it. In the same way, they argue the second place corresponds to Jupiter, who acts and portends something, and that Jupiter acts and portends something because he corresponds to the second place.

You will find many examples of this in their books, often concerning things far more ridiculous, especially if you come upon the books of Albumasar. In his work I recently read that the Moon grants one hundred and eight years, and the Sun one hundred and twenty years, for the Moon falls short of the Sun's lifespan by twelve years, since it has no power unless it has already been separated from the Sun by twelve degrees. No wonder Albumasar boasts he has fully rendered the rationale of astrological doctrine. Nothing is so irrational that it does not seem a rationale to him.

There is equal madness when astrologers say that the shorter years of the Sun (nineteen) are such because in this number the luminaries are joined together in mean motion. There is absolutely nothing in common, nothing connected, nothing following from what came before to what comes after. Yet they argue thus: after this number of years the Sun and Moon meet again in mean motion, therefore the Sun grants that number of years.

The Sun gives very little.

This is similar to saying that because a man is born with two eyes, he is also born from two parents. By a parabolic similarity: the Moon is the gate of the heavens, therefore it signifies the mouth; for the mouth is nearly the gate of the house, and the mouth is the gate of

food and speech. The beard likewise pertains to the same, because it faithfully renews itself again and again like the Moon.

The ears, moreover, are assigned to Saturn, because they occupy lofty parts on the head, just as Saturn does in the heavens. For the same reason, since Saturn is supreme, he is said to beget tall men (something contrary to his nature, since he is judged cold and dry).

These are the arguments by which astrologers support their celestial dogmas. I would not call them arguments, but occasions either for error or for jesting. By hearing these, the vanity of the dogma is just as evident as the firmness of a doctrine can be known when truths are heard. Better for astrologers to have veiled these matters, as though they were mysteries, leaving behind a suspicion of secrecy. Instead, they wish to appear rational, and so sign their own indictment with their own hand, and by their very arguments. To hear them is to understand what has led them into error.

Here ends the tenth book of Giovanni Pico della Mirandola's Disputations Against Divinatory Astrology.

Disputations Against Divinatory Astrology

By Giovanni Pico della Mirandola, Count of Concordia

Book Eleven

Chapter One

From the things thus far proven, it is clear astrology is not confirmed by experiments. The same is also proven by many arguments.

If astrologers cannot grasp the nature of celestial things by reason (which we have demonstrated) can they appeal to empirical experience? They may be ignorant of *why* things happen in a particular way, but perhaps they have learned by observation that things *do* happen in that way. Perhaps if astrology cannot possess the name of science, it can nonetheless claim the prerogative of an art and of true tradition. If it has achieved the ability to predict truths, it does not matter whether it uses syllogisms or experiments, provided it achieves successful divination.

Astrologers are accustomed, just like every wondrous art, to defend themselves behind the walls of empiricism, into which, as into a sanctuary, they retreat whenever they speak or promise something beyond belief and contrary to reason. They think themselves released from the snares of argument if they merely declare they have ‘experienced it’.

This refuge we shall take from them, a refuge built up by those who have learned to speak with the lips and to hear with the ears rather than with the heart.

For if anyone has clearly, and in a well-considered way, determined the role of experience as a road to knowledge, and how it compares with the influence of the heavens, he

will doubtlessly conclude the particular powers and proper operations of the stars lie beyond the reach of man's experiments as much as they lie beyond his reasoning.

Indeed, if fate does not derive from the heavens (if it does, it depends not on the initial hour but on the affinity of the matter) then no path remains open to experiments. And if it does derive from the heavens, which star influenced which person will be uncertain as the unknown unique condition of that original matter. Moreover, if anyone makes the seminal hour the decisive one, even the astrologers themselves must admit the opportunity for observation is far too deeply hidden.

Yet even if the time of birth has been observed, in what way could the observation be reliable?

As we have shown, if it has not been determined how many and which celestial causes are to be observed, nor, of those which they have comprehended, what the form is, what the disposition is, what the position is (astrologers can determine none of these with certainty at each moment), astrologers neither have the exact natal hour from the ruler of the nativity, nor can they correct deviations.

If they fail in these matters (we have shown them to always fail), the authority of the entire observation necessarily collapses. But even if astrologers do not fail here, we will demonstrate in this book that no experiments concerning the heavens can be carried out.

Let us grant to the *genethliaci* that they accurately determine the natal hour, and that they record the state of the heavens at that hour with the utmost precision. Still I ask: what decree of the heavens does such a constellation produce or signify, and in what way do they know this by experience? Experience is gathered by multiple and frequently repeated observations; but the same constellation, as the more learned affirm, either never returns at all, or, as the ancients believed, does not return except after many thousands of ages.

Astrologers will perhaps respond that particular constellations do return and are repeated often, even if the full and complete restoration of the entire constellation does not occur. Therefore, through repeated observations, they may obtain knowledge of particulars, from which, when experiments have been gathered, future events may be reliably predicted.

This might be illustrated thus: someone is born with Aries rising, with the star of Mars placed there, and with Saturn occupying the seventh house, and the other elements arranged in their own manner. Another person is born with a nativity otherwise different, but similar with respect to Mars and Saturn. The astrologer can observe that combination twice, albeit not the full particular constellation. When this happens more often, by repeated observations, our astrologer will arrive at an empirical experiment.

Thus they might defend themselves – but not very truthfully, nor very consistently, even with their own principles.

First, because the same particular constellation produces different effects in a different overall context. Second, because the essence of the entire decree arises not so much from the parts as from the whole. That is, from the harmony of all the parts producing something unique and proper, which no part by itself, nor even all parts taken together, can produce. The sum of all the parts is one thing; what arises through the proportion of their mixture is quite another.

Therefore, any observation from which astrologers derive their experiments will be imperfect. That which is imperfect, which in no way considers the whole. That which is deceptive, which does not consider the same part within the same whole. That reasoning which derives from the astrologers' own precepts (they assert all things are brought about through the mixtures of stars: not by their proper powers, but by the combined effect of all together. The coalition of stellar association produces fate). All of these are flawed.

Therefore, even if in these nativities Mars and Saturn sit on the principal angles directly opposite one another, and you see the ruler of the nativity afflicted with calamities, you cannot (through experiment) foretell calamities when the same celestial arrangement happens elsewhere. Nothing prevents that constellation, under a different disposition of the other stars, from agreeing in such a way that it either causes no harm, or produces something entirely different from what it did in other nativities, on account of the differing mixtures of rays. And this is if we agree with the astrologers that the heavens form fates for humans.

We discover this daily by experience. The most fortunate nativities belong to the most unfortunate people, and on the contrary, the most unfortunate nativities belong to the most fortunate. Although particular constellations may seem, based on past observations, to portend either good or bad fortune, the harmony of the overall disposition (never before seen, known, or examined) produces something other than what those separate elements, or those elements in another mixture, previously portended.

Taking this into account, the most ancient astrologers set forth particular nativities they had observed individually, and compared them with the outcomes, so they might not so much show what Saturn or Jupiter did, but what the whole constellation produced. Julius Firmicus Maternus, in his sixth book of commentaries, attempts this by the example of the Egyptians.

Ptolemy, however, accuses these writers of not reducing the art to a method, and of pursuing something infinite and incomprehensible. He turned himself to universal precepts and to explaining the simple powers of the stars. Once these were known, the *genethliaci* might then judge a particular mixture by conjecture. But although Ptolemy rightly accuses ancient astrologers, he himself is no less rightly to be accused.

For the ancients rightly saw what needed to be done. They merely erred in thinking it was something which could be done, since it turns out to be infinite, and cannot be reduced

either to an art or to a method, and there is no use in it, since the same combination of stars is never again restored.

Ptolemy, in thinking not of what ought to be done, but of what could be done, wandered too far astray, if he believed true predictions could be fashioned from general precepts. Perhaps this is the reason, as Ibn Ezra writes, Ptolemy's precepts agree with neither events or experience. But Ptolemy earns less blame, because, as we showed in the second book, he plainly confesses this art to be conjectural, uncertain, doubtful, and fallible.

Having brought the *genethliaci* into the discussion, let us press the point. O *genethliaci*, if all other things be granted to you, so the harmony of the heavens is admitted as powerful and principal in producing effects determining the fortune of the one born… since neither reason nor observation provides you with knowledge, how can explain the truth of fate?

You are mistaken if you think the efficacy of the whole is a collection of the effects the individual parts produce. That happens only in aggregated and adhering bodies or qualities, not where things are mixed and grow into another form, as all astrology believes the case with the stars. One does not understand the medicinal property of *theriac* merely from observing the powers of the individual ingredients. Similarly, one who observes only separate parts of the sky cannot understand what the configuration as a whole brings about. Never mind the relation of part to part, that is, of star to planet, but the condition and relationship of all the stars to one another is what brings about the fate of the one born.

The individual properties nature gives are not produced from the concurrence of accidental things, but are incommunicable, either belonging to a peculiar substance or a private strength. The nature of a single star cannot be known through empirical experience, since no star acts alone, but always together with others. Not only can single stars be defined only in relation to others, but they cannot be understood in isolation. From the whole

constellation you may see a pattern of life, and events arising, but since all the stars together are the agents, you cannot know which star is the cause of any particular effect, unless you first understand the nature of each star separately (either by reason or by some other method).

Astrologers will argue that one could observe using a particular method. When you see similarity in the fates of certain men, note which parts of their natal charts agree. They may argue that importance especially arises from that point, things often being made known through observation.

This is a most deceptive way of conjecturing.

First, a similar condition of a star can produce a different result when the mixture is different, and a dissimilar condition can produce the same result. Second, chance can produce the same effect without the same cause, since according to the opinion of astrologers there are nearly innumerable causes in the heavens for the same effect.

The whole matter will be clearer by example. Peter is born with Jupiter placed in Pisces; Paul is born with Jupiter similarly situated, but with an entirely different remaining constellation. They live differently in terms of character, intellect, and health, and are equal in fortune only with respect to the accumulation of wealth. Can one therefore conjecture that the giver of wealth is Jupiter placed in Pisces in the second house? Certainly not.

The commonality of their fate, an abundance of wealth, could have arisen from different celestial causes, not from shared causes. Perhaps in one nativity, the ruler of the Ascendant, the Sun, occupied the angle and bestowed power. In the other, at birth, the Part of Fortune held the Ascendant and was joined by a beneficent ray to its ruler. Or in one nativity, a fortunate planet shone at the first angle. In the other, Mercury, placed there, may have transferred its own force to a fortunate and angular planet.

If, at Peter's birth, Venus residing in the fifth house held power in the first house, but at Paul's birth, the luminaries, free from debilitating afflictions, looked upon each other with

friendliness… according to the opinion of astrologers, the same fortune in wealth may occur to both, but not from the same stars. Meanwhile, different outcomes may be brought about by different chances, even if the star thought to be the worker of that matter was similarly positioned in the nativities.

The exact same condition of a single star cannot exist unless the entire constellation is exactly replicated. Also in one chart, a contrary force could have been present, overwhelming or dulling the influence of that star.

From the combined and intermingled influence of the stars, we cannot, by any observation, discern what each star in particular bestows. Hence, we cannot define the powers and natures of the stars as known by experience.

Another insurmountable difficulty, even if each star acted separately: since the stellar effects can be inverted, interrupted, or frustrated in various ways by the condition of another star or of lower and surrounding causes, no one (save the reckless and rash) would assert these things happen because the star was thus disposed, and thus when it is disposed in the same way another time, a similar event should also be expected.

Perhaps that star by its own nature was about to produce a different result, but its effect was changed by the private fate or destiny of the individual. Or by the universal fate of the region, year, ruler, city, family, or household. Or by antecedents, such as the parents, grandparents, great-grandparents. Or by the will of the one born. Or by the disposition of the air, through which the celestial influences are transmitted to us. Or by recalcitrant matter. Or by a more proximate cause not well or suitably disposed for the higher motions.

Since all these things can alter the effectiveness of the stars, how can any argument be secure if we interpret the nature of the stars ‘from what happens’? Especially when all those things we mentioned are always so annexed to the operations of the stars that what occurs cannot be referred back to the star as a first cause.

When people observe something in certain regions – for example, the Egyptians, or the Chaldeans, or the Arabs – and believe it to have the standing of a universal doctrine, they are inexcusably mistaken. They imagine their conclusions equally valid in every region, and that they have handed down the truth, even though it must necessarily occur otherwise, and as the practice and credibility of life itself demonstrates. For in the changes of the air we very plainly see that from the same constellation different weather arises in different places: here calm, there violent storms; here snow, there mild weather; elsewhere winds, elsewhere rains.

It is therefore absurd to suppose that in newborn humans, there would not be a different fate from a different curve of the heavens (if indeed these things come from the heavens), even if the same stars operate in different regions.

Favorinus also raised these objections, which is confirmed by the authority of Paul of Alexandria. Paul writes in the *Introductions to the Apotelesmata* that in Egypt nativities are especially fortunate when Aquarius, holding the principal places, is well disposed, since the region of Egypt lies under Aquarius. Perhaps from this comes the belief that Mercury in Aquarius favours and inspires the talents of the Egyptians. But according to Maternus Mercury is abased and fares poorly in every house of Saturn.

Thus, by the testimony of a distinguished astrologer, the same observations (if any could be reliably made) are not valid equally in every region, something we have already demonstrated by many reasons. If Hippocrates, the father of physicians, said that empirical experience in medicine is deceptive, no one, however unlearned, would deny it is far more deceptive in astrology.

Chapter Two

If any experience can be had concerning astrological doctrines, it has not yet been had.

We have thus far pursued this point. Neither length of time, nor industry, nor mortal learning can yield an experimental knowledge of the more secret and occult powers of the stars. If this has been inadequately grasped, we will clearly demonstrate: if such empirical experience can be attained at all, it has not yet been attained.

By earlier arguments, we established that knowledge of such matters is exceedingly difficult, and cannot be perfected, except over many ages of celestial revolution. We have refuted those falsehoods of astrologers by which they, as Christian men, unskilfully and falsely boast that they possess records of many thousands of years of observation.

Next, we will show that whatever observations they do have, according to their own accounts, are deceptive. The philosopher Favorinus, quoted by Gellius, says: “This discipline of the Chaldeans is not of such antiquity as they wish it to seem,” and Cicero, following the authority of Panaetius, says: “When they claim the Babylonians carried out observations and experiments over forty or seventy thousand years upon newborn children, they deceive. We have no author who says this was done or knows it to have been done.”

So says Cicero.

Let us, beginning from a higher point, expose the shamelessness of such men. And whether the world is eternal (as certain philosophers hold) or made in time, as Divine Truth teaches, let us leave this point most clearly attested. No observations older than four thousand years could have reached recorders of knowledge concerning the stars. For it is certain, even to those philosophers who believed in the eternity of the world, that due to certain great changes of the elements, the seas dried up, and the lands were flooded, and the habitations of men and animals have been changed. Once there was land, now there is ocean, and land where once was ocean.

Not only sacred historians, but also the philosopher Plato, and barbarian writers, have mentioned deluges and conflagrations of this kind. But it makes no difference whether the novelty of the world or the alteration of past things has destroyed the memory of them. Therefore, let us examine from histories how ancient these observations of the heavens could possibly have been.

Varro, most learned of the Romans, when he intended to construct a history as ancient as possible, began from the kingdom of the Sicinnii. Trogus, slightly earlier than or contemporary with St Paul, began from Ninus himself, who fought with Zoroaster and was a few years older than the patriarch Abraham. Those who write that Zoroaster flourished five thousand years before the Trojan War are thus revealed as fabulists, since not even that many years can be counted from Abraham down to our own times.

Why did both Trogus and Varro, professing to write the most ancient histories, not begin from a more remote point? Unless the destruction, novelty, or a certain change of the world caused things to be lost or entirely obliterated? For although they intended to write ancient histories, they nevertheless wanted to write truth, and not fables such as those of Herodotus and Diodorus, whose accounts shameless liars use to bolster their claims of astronomical observations over many thousands of centuries. As though Diodorus' title, or Herodotus's agreement with all letters, were not considered the stuff of fantasy.

But let us pass over such matters as beside the point.

There is the testimony of Porphyry, who says the records of the Chaldeans concerning the stars, which Calisthenes sent from Babylon to Greece in the time of Aristotle and Alexander, contained observations of only one thousand nine hundred and three years. Counting those years back from Alexander, you find them terminating around the time of the patriarch Abraham or slightly earlier. Hipparchus and Ptolemy, the princes of astronomy, when they cite the observations of the ancients, themselves unveil none older than those

made under King Nebuchadnezzar among the Egyptians or Babylonians. Hipparchus flourished around the six hundredth year after that king's reign, and from him to our own times no more than sixteen hundred years (or thereabouts) have passed.

Falsely and fabulously, therefore, do astrologers boast that they possess observations of so many centuries. Indeed, those observations they do possess must necessarily be false, as is easily shown. Either they were begun in the time of Ptolemy, or they came down from those who preceded Ptolemy. If the practice of such observation began after Ptolemy, there has been insufficient time to perfect observational methodology, which even astrologers themselves will not deny. But if they rely on the experiments of the ancients, that is, the records handed down by the Egyptians or Chaldeans, who would doubt they are fallacious?

For reliable observation concerning the heavens cannot exist among those who have not properly understood the motions of the heavenly bodies. That the Chaldeans and Egyptians greatly erred in these matters is known by everyone who has even touched upon the books of the mathematicians. Ptolemy censures them everywhere in the *Almagest.* So does Hipparchus. Nor would anyone easily believe how recently accurate knowledge of the motions of the heavens began to arise.

The first to predict a solar eclipse, according to Eudemus of Rhodes, was Thales. Callimachus says he was the first discoverer of the Little Bear, *Ursa Minor*, by which the Phoenicians navigate. The same man divided the year into three hundred and sixty-five days. Plutarch reports that the obliquity of the Zodiac, the first rudiment of sidereal science, was devised by Pythagoras, although a certain Euripides of Chios, younger than Pythagoras, boasts it was first discovered by himself, before Solon flourished in Greece. Solon, however, flourished about six centuries before the time of Christ.

Everyone thinks the lunar month consists of thirty days. Solon was the first to correct this error, as Proclus writes in his commentary on Plato's *Timaeus*. But if the ancients erred

so notably in the motion of the Moon, a motion so simple and familiar to us, what should we suppose about the motions of the other stars, which are more hidden and slower?

But no need for conjecture. Let the book of Ptolemy be read, titled the *Almagest*, and it will plainly appear, beyond all suspicion, that all the ancients went completely astray in their account of the motions of the heavenly bodies. Utterly, as the saying goes, missing the mark by a whole sky.

As for the motion of the nearer star, of which we were speaking, you will learn that the ancients discovered nothing true, nor even close to the truth. Hipparchus was the first to observe the Moon's course accurately, on the island of Rhodes, around the two hundredth year before Christ, but even then not with complete accuracy. He is corrected by Ptolemy, who came closer to the truth than Hipparchus, though he did not reach it.

Then the Spanish astronomers corrected Ptolemy. Yet in the motion of the Sun, by which they measure the others, astronomers still grope in blindness. Antiquity could have hardly attained it.

The Egyptians deviated too much, thinking the restitution of the Sun occurred after three hundred and sixty-five days and a fourth part of a day, with the addition of a [missing word]. Later and more accurate observations have shown that not even the fourth part is fully completed.

How could the experiments of the Egyptian sages concerning the fate of the year be trustworthy, when they erred so grievously regarding its beginning? It was also ridiculous that they began the year, as Theophilus reports, when the Nile first flooded Egypt.

Anaximander, as Favorinus writes in *Universal History*, was the first to invent the gnomon, by which he marked the Sun's turnings and the equinoxes. The astrolabe was invented by Ptolemy, as we know from his books. Pythagoras was the first to say that the

Evening Star and the Morning Star are the same, with Parmenides as his authority. Pythagoras did not precede Christ by more than five hundred years.

But let us return to matters of celestial motion, which was so little known to the ancients that (according to Hipparchus) few observations of the five planets (excluding the Sun and Moon) existed among them. Nothing concerning those five planets could be affirmed by him as having been verified. Ptolemy was the first to say anything certain about them, and later ages corrected him with the advantage of time.

As for the ascensions, which the Greeks call *anaphoras*, for numbering the signs, the first book of Ptolemy's *Apotelesmata*, and Apollinarius in his commentaries, bear witness to how all in Egypt who practiced divination by the stars deviated from the truth. Apollonius of Laodicea mocked their errors in five books of a dedicated work.

Considering these things, no true experiment concerning the influences of the stars could have been recorded by either the Egyptians or Chaldeans, since they had neither the ascensions of the signs (on which the greatest part of this art depends) nor the motions of the planets worked out. How could they reliably determine what a planet would do in any place, when the planets were always in a different place than where they supposed them to be?

So too the fixed stars, whose motions, if we believe Ptolemy, were completely unknown to them. If the ancients erred, as it is undoubtedly clear, the Greeks who followed them also erred, and the Arabs who followed the Greeks erred, and the Latins who follow both the Arabs and the Greeks err as well, making predictions based on their rules without having themselves made the observations.

Nor do astrologers assert anything with greater authority than what they confirm by the authority of the Chaldeans and Egyptians. They blow mists before their readers with names such as Aesculapius, and Hermes Trismegistus, and Nechepsos, and Petosiris. Entirely empty names. As if these had not been most unskilled in the science they professed.

If Hipparchus and Ptolemy, the chief authors of astronomy, handed down the truth to us, why does Ptolemy, in the first book of the *Apotelesmata*, lend credibility to his statements by turning towards the experiments of the ancients? Experiments which, in his own time, he could scarcely begin to ground in the truth of stellar science, since only then was it first tolerably investigated?

Pietro d'Abano excuses Galen, who errs in the motions of the Moon, in this way: "Galen did not write these things exactly, for they were not yet understood."

Yet Galen was not prior to Ptolemy, but his contemporary.

Therefore, let us conclude the whole dispute thus: if astrology, as it is written, depends on the experiments of the ancients, it is deceptive. The ancients lacked the requisite methodology. If even the moderns are uncertain in heavenly matters (as we have shown above), how much less clear was astronomy to the ancients?

The writings of the more recent astrologers are even more fallacious, lacking both reason and time.

Here ends the eleventh book of Giovanni Pico della Mirandola's Disputations Against Divinatory Astrology.

Disputations Against Divinatory Astrology

By Giovanni Pico della Mirandola, Count of Concordia

Book Twelve

Chapter One

Place no faith in astrology as if it be a revealed truth.

If the fables of the astrologers are supported neither by reason nor by experiment, what now remains? Why should a wise man devote himself to astrology? Is it to be considered oracular? Shall we accept as divine that which we refuted as scarcely rational, and thereby imitate the astrologers themselves, who, if anything happens among men contrary to reason, refer it to the stars? Shall we, by the same example, refer the ravings of men to the gods?

If this persuasion has seized someone, let him know that such divine revelations are of no benefit, since, as we have seen, great disagreement arises in the decrees of astrology. It is not yet revealed whether the 'divine' astrology in question is that of the Chaldeans, or of the Egyptians, or the Jews, or of Ptolemy, or of the Arabs – that astrology which, by some singular favour, the gods have supposedly inspired for our well-deserving benefit.

Astrology does nothing to help us by divine beneficence, if as men wallow amid the filth of earthly lies, that same astrology – widely received from heaven – is considered the most true celestial wisdom. Nor has any Lydian stone been sent down, by which the legitimate may be distinguished from the adulterated.

But if I am speaking with Christians, let me ask: was astrology revealed by God, or by a demon? It cannot be from God, since the sacred scriptures – the interpreters of the divine

voice – forbid it. If from a demon, no trust can be given to a demon, whom God called the father of lies.

Hence is refuted the madness of those who claim that this science, like all others, was divinely given to Adam, and from him handed down to Noah, whose son Jonithes, as Methodius relates, foretold many future things by this art. They say it passed from the sons of Noah who survived the flood to Abraham the Patriarch, who, according to Josephus, taught it to the Egyptians. The Egyptians taught the Greeks, and the Greeks taught the Latins.

Thus astrologers invent for themselves a very fine succession, convenient for deceiving the unlearned, but false and deceitful in every respect to the more learned. What they claim of Adam (unless that is also revealed)… by what testimony do they prove it? Or, because we believe Adam was knowledgeable in all sciences by the gift of God, does it follow he knew this one also? Certainly it would follow, if astrology were a science, if it were not vain, false, ridiculous, contrary to the principles of true doctrines, unworthy of God and even of mortal invention.

Let us come to Jonithes. Methodius does indeed write about him, but he is a scarcely adequate authority. Methodius is not the one whom St Jerome mentions among illustrious men. This one was of Parcharensis, the other was entirely different, and sometimes cited by Peter Comestor, in whom no one moderately learned fails to find fault.

But neither does Methodius say Jonithes predicted anything; moreover, what authority can the testimony of an obscure writer have regarding this Jonithes? Moses the prophet himself counts only three sons of Noah: Shem, Ham, and Japheth; nor does Josephus name anyone other than these; nor Philo, nor any Hebrew writer, whether historian or expositor of the Mosaic Law.

Let us believe Josephus that Abraham taught the Egyptians astrology – but not the superstitious divinatory kind, more prevalent among idolaters than among worshippers of the

true God, who is called the God of Abraham. Moses and the Prophets repudiated that flavour of astrology, even though those who practiced it claimed to follow the tradition and teachings of Abraham. Rather, Abraham taught mathematical knowledge concerning the motions and masses of the stars, whose use was frequent and necessary among the Hebrews for observing the fixed times of ceremonies. For the study of this knowledge, the tribe of Issachar was assigned, as is recorded in Hebrew writings.

This science is not learned without arithmetic, since it almost entirely consists of numbers and measurements. This, along with astrology, Abraham is said by Josephus to have demonstrated to the Egyptians. If he had meant the divinatory kind instead, he would have been entirely wrong, since that form of astrology was received by the Egyptians from the Chaldeans.

But it is clear the Egyptians developed their own astrology for themselves, which has hardly anything in common with the doctrines of the Chaldeans. As for the branch concerning the movements of the stars, Ptolemy in the *Almagest* teaches that few Chaldeans practiced it, and that it flowed forth to others beyond them. Therefore, Josephus refers not to the divinatory, but the mathematical kind.

Albumasar, mockingly, says the sons of Noah, when they came into Chaldea, disseminated this science. Although this was considered to have been received from heaven, Albumasar himself rejects as Chaldean the opinion about the bounds of the planets.

But too much effort should not be expended on refuting these trifles. Everyone save the extremely slow understands that these are the ravings of men who so enslave their faith to their dreams that they invoke the authority of Adam to defend things they have advanced without any reasoning.

Why have other arts and sciences not also come down to us through that succession, but instead were devised by the talents of later generations and perfected by the diligence of

study? Have we been granted a divine gift of Providence in astrology alone, as if it were more useful?

Truly, had Providence not been sleeping, it would have noticed this divinatory science is useless unless the mathematical science is also preserved, without which we cannot use the former correctly. It is of no use to learn the powers and natures of the stars unless you can, by exact calculation, note the positions, configurations, and aspects of the stars at each hour.

But since mathematics alone provides this, it too ought to have been passed down to us by hereditary tradition from the first father – if Divine Providence had not wished such a useful practice of divination to be lacking from human life.

Chapter Two

What sort of Egyptians and Chaldeans were they, among whom astrology was born?

We have rejected those who unworthily venerate these trifles as though received from heaven. Astrology is so false and fabricated, that when one reads of it and reflects inwardly, one sees that no heavenly inspiration is left within it. From what has been said, I think this sufficiently evident even to the dullest.

Nevertheless, it will not be useless for the reader to consider how this plague was born and spread itself through the world. By what assistance it was nourished, by what persuasions it was accepted, by what authority it was confirmed, by what support it has endured to this day. This also may dent faith in astrology, and reveal its vanity.

Astrology was born of Chaldean and Egyptian parents, about whom something must be said before we consider the vanity of their inventions.

Each of these peoples was especially devoted to and skilled in two things: idolatrous religion and mathematics. They were enticed to astrology by the suitability of their location,

for they inhabited open plains and broad flatlands, where the observation of the stars was easier and more accurate. As for the other matter, their engagement in vain and superstitious ceremonies, why should they have been more occupied with, and honoured for these, than other peoples?

Because of antiquity. They were the first to practice the worship of the gods, and were, as it were, the parents of religion to others, and necessarily its teachers. Also, as we have shown elsewhere, because of their lack of wisdom, lack of natural philosophy, and the rawness of their intellects.

Nam mathematica quidem sapientes non facit. Mathematics indeed does not make men wise, which is why it was, among the ancients, a study for boys. Rather, if tasted moderately and with reason, it paves the way for philosophy; but if anyone devotes himself entirely to mathematics alone, it generates the greatest opportunities for errors in philosophy, as Aristotle attests.

The Egyptians and Chaldeans, so far as I can gather by conjecture, had minds little fitted by nature for wisdom, something evident in the people of those regions today. Even if chance had deprived them of the cultivation of study, it would not have taken away their natural disposition.

We should not be deceived by that which once deceived me in my youth: the celebrated reputation among the ancients, even among Plato, of the wisdom of the Egyptians and Chaldeans. Pythagoras, Democritus, Eudoxus, Plato himself, and many others are recorded to have visited these people for no other reason than the pursuit of wisdom.

For they laid claim to that famous and divine name of ‘wisdom’ solely on account of their knowledge of ceremonies and of the worship of the gods. This was the belief held among all nations and even by all good philosophers: that the highest wisdom lies in religion.

Plato, Pythagoras, and many others, rightly perceived that the truest philosophy consists in knowledge of the divine. Since the Egyptians were widely reputed for special skill in this domain, the philosophers journeyed down to their lands, eager to learn whatever seemed occult, secret, and sacred.

They also sailed down to Egypt to learn mathematics, and those whom we have mentioned drank from that well with eagerness: Pythagoras, Democritus, and Eudoxus.

But the title and the prerogative of wisdom, and the reputation of a more secret discipline, came to the Chaldeans and Egyptians from nowhere else than from their teachings and doctrines concerning the worship of the gods. The good philosophers heard from them, and approved. With natural philosophy and metaphysics, demonstrated by reason, the Greek philosophers, insofar as they truly philosophised, received nothing from the Egyptians. But what pertains to ceremonies and mathematics… that they did.

As evidence: whenever there is discussion of mathematics or mysteries, we see the Chaldeans and Egyptians cited, and their opinions always brought forth. But in the deep reasonings of philosophy, in Plato and Aristotle, their names are not found at all.

If you say Thales philosophised in Egypt, I shall not deny it. He even learned from them that water is the base principle of things. I believe the Egyptians were led into this opinion because they saw their land blessed and made fertile by the inundation of the Nile (from the overflowing of which they also began their year). The Egyptians were, indeed, most unrefined minds, and well-suited to superstitions.

Nothing rejects and spurns superstition more than the lively power of intellect aided by instruction. The Egyptians and Chaldeans were so easily led astray they were driven by demons into every kind of madness. For them, religion was nothing other than superstition. Iamblichus in large part admits this, confirming that they were utterly absorbed in the worship of evil demons.

It follows that, since this ‘wisdom’ came from the name of religion, the more the Egyptians were considered wise, the more foolish they were. However, as said above, their interaction with Greek philosophers was more in mathematics than in their superstitions.

Thales, in a letter to Pherecydes of Syros, says: “I travelled down into Egypt with Solon so that we might see the priests and the astronomers.”

Nothing about philosophy.

Demetrius says Thales learned geometry from the Egyptians. Democritus also went to Egypt to learn geometry. Sometimes, even Pythagoras is called monstrous by Democritus, Plato, and the Wise. But Plato’s blameless genius stands out. Necessary for the fates and the age, he gave honour to antiquity and to the title of religion, but never contaminated his own substance with the leaven of Egypt. Eudoxus too. He followed the Egyptians in true astronomy, but did not agree with them in the divinatory kind.

But lest we digress too far, we thus conclude: the Egyptians and Chaldeans were thoroughly occupied with idolatrous superstition and greatly devoted to mathematics, but exercised themselves little in the rest of philosophy. Nor should anyone be swayed by Averroes saying that philosophy was once perfect among the Chaldeans. He is not speaking of the Chaldeans whose memory or monuments have reached us, but from that opinion which, believing in the eternity of the world, says that these arts have both been lost and revived among different peoples.

Nor would it disadvantage us to reject the Chaldeans altogether, from whom Abraham, a divine man, allegedly came. Abraham was not a Chaldean, but from Ur, although from the vicinity of those regions he is sometimes called Chaldean. It has been said by Plato, that in a nation which is mostly evil, if any good man is born, he is the best of all. Nor did Abraham obtain his privilege from nature so much as from divine grace.

But let us return to astrology, in which matter it is easy to see what attracted the Egyptians and Chaldeans. We have already said enough of their studies and talents.

Chapter Three

That which led the Chaldeans and Egyptians into this opinion: that there are human fates, and that they can be foreseen from the stars.

Those who have completely immersed themselves in a discipline tend to refer everything back to that discipline. Not so much because of ambition, so that they may seem to know everything, but rather because, to them, it seems the truth. This happens by experience. It happens to those traveling through snow: other things seem white, the appearance of whiteness having been received into the eyes, and all becomes transformed. Thus also for lovers madly in love, where everything reminds them of the beloved, her face, or at least something belonging to her, under the sway of one single image, with the whole imaginative faculty of the lover reduced to it.

He who is a theologian, and nothing but a theologian, refers all things to divine causes; the physician, to the condition of the body; the natural philosopher, to the natural principles of things; the mathematician, to shapes and numbers. The Pythagoreans did this. The ancients among the Chaldeans were constantly measuring the motions of the heavens and observing the courses of the stars, and were held by nothing more strongly than this pursuit due to their disposition. For them, everything was stars. That is, they eagerly referred everything to the stars.

Let the same be said equally of the Egyptians.

To this professional inclination were added conjectures, which we recounted and refuted in Book Three, such as that lower bodies are moved by higher ones, that the stars are

able to exert great powers of influence, that in the Sun and Moon one sees how much they dominate our bodies and the air, and similar things. When these occur to minds already inclined in that direction, they are easily led to believe whatever happens to humans (whether in regards to the strength of the body, the mind, or fortune) shines forth from celestial causes. Moreover, by knowing and exploring these celestial causes, future events might be foreknown.

The Chaldeans and Egyptians did not so clearly understand natural things, so as to comprehend sufficiently the difference between a universal cause and particular causes, or what the function of that one and of these was, or what was appropriate to celestial substance and what was incompatible with it. Nor could they distinguish what is said *per se* by dialecticians, and what is *per accidens*; or the difference between the works of nature and those of art; or what could be a sign of something else, though not its cause.

Stirred by such faulty reasoning, and not pausing, they assigned the particular variations of common causes to proximate causes. As if God and the heavens are insufficiently good, they equally imputed their own faults to the stars, and derived punishments (both the evils of the soul and of the body) from there. As if the nature of the body understands the random, simultaneous convergence of incidental causes referred to it. As if art penetrates the innermost substance of the thing, and fresh forces flow down from the heavens, into artistic creations. They supposed it to be so.

Or, if these things were not done by the heavens, they nevertheless believed they could be signified by them (although not even if they were mutually related, either as effects or causes, would both signs and events proceed from the same origin in the same way).

The Chaldeans and Egyptians were ignorant of all these things, with philosophy as yet little perfected, and barely investigated by them. What wonder then, with so many influences dragging them into error, they were led first by conjectures? Those conjectures (as we have

said) are ineffective, but of great plausibility to the common people and those unskilled in philosophy. They were led further by that continual association with the stars and, as it were, familiarity with them. To this was added the innate curiosity in humans to know the future. Things we wish to happen, we easily believe to be possible.

Then add the vice of the age, and a persuasion of divination deeply implanted in the minds of men at that time, of a thousand methods and forms. Much less credible than astrology and more full of madness, these were eagerly fabricated, such as pyromancy, geomancy, astragalomancy and other such childish trifles, against which the errors of astrologers seem the summit of wisdom. Indeed, it greatly agreed with the idolatry to which the people were subject, for they considered those whom they worshipped as gods to be the authors of all things, not only of good but also of evil. It was part of that idolatrous doctrine, that some gods were beneficent, others harmful, so contrary to the reason of philosophy, they judged some stars good, others evil.

Add to this the opportunity for glory and profit, which astronomers saw on offer, if the courses of the heavens (investigated with great labour but little reward) were believed to predict the future. Add the deceptions of wicked demons, who ruled the world at that time, and who, because of the reasons already mentioned, impelled their minds (already inclined to error) by hidden instigations. At times these demons perverted astronomers' judgements, enslaving their minds. At other times they confirmed their folly, or moved them to prophecy, or fulfilled predictions.

I do not doubt. These things together were the cause why, among the Egyptians and Chaldeans (men given to superstitions and idolatry, entirely occupied with the motions of the heavens, and little skilled in philosophy), the opinion first arose that the future could be foreseen from the condition of the stars. This opinion, once received, the age embraced

through curiosity and ignorance. The astronomers most willingly confirmed it, in hope of gain and acquiring glory.

Chapter Four

How they came upon those things which they required to be observed in predictions.

We have seen among which peoples, and in what manner, this error first arose – the mistaken notion that human affairs derive from the heavens or are indicated by them. How astrologers came upon the doctrines they use in prediction is easy to see.

As we have demonstrated, they were not led by true reasoning. How could they be? No true reasoning can be fashioned from falsehood. We discover the properties of things connected to us by place and nature from their operations. But neither were astrologers led by empirical experiment. Otherwise, they ought to have ceased predictions for many generations, since experiments of this kind are completed only through long-lasting observations and frequent repetitions.

What, then? Astrologers confidently put forward conjectures, partly from the mathematicians upon whom they relied, and partly from certain parabolic similarities. Nothing could be more deceptive. Either they themselves were deceived, unskilled in philosophy and dialectic, or they thought the ignorant common people could be deceived. Nor was the path of truth likely to satisfy those seeking the profit and glory of divination than the easier and more accessible path.

Thus they first decreed that human fates depend upon the natal hour, reasoning that it seems to the common folk that a man comes into being when he is born. Other principles, the conception of the foetus or its animation, were uncertain as to how they ought to be observed for the purpose of prediction.

Astrologers accepted from the mathematicians the fact that, since they were measuring the motions of the stars, the division of the oblique circle into twelve parts, for ease of numbering. By the same reasoning, the division of each part into thirty, and each thirtieth into sixty. Astrologers considered this division as if made by nature rather than by human decision, and because they themselves had devised those parts, they decreed as many forces and distinct properties of influences as the parts themselves.

According to the number of signs, they divided twelve houses, six above the horizon, six below, just as six signs always revolve beneath the Earth, and six above. With great error, they specified the observation of which house or in which sign a planet is located. Otherwise, so astrologers claimed, powers of influence would differ depending on the house and sign.

After this, whatever differences they detected in the motions of the stars, they judged those differences should also be noted, as if efficacy would also vary on that account.

They decided a planet would do one thing when moving forwards, another when moving backwards, another when standing still. Also that different things happen depending on the stars' conjunction or distance from each other.

They observed certain distances which, since they measured motions by degrees, they found associated with some more notable changes. For example, the trine interval, in which Saturn and Jupiter, when configured with the Sun, always retrograde, just as Mars sometimes does in a square; and that Mercury and Venus are never seen to move more than a sextile away from the Sun.

Astrologers therefore believed distances between the stars were to be observed, when trine, sextile, or square aspects were posited between them. Also the opposition. They observed the phases of the Moon changing in relation to the Sun: crescent in the sextile, half in the square, gibbous in the trine, full in the opposition.

Likewise, they imagined intersections of circles with the path of the Sun – necessary for measuring motions, pointless with regards to influences. They applied these to the decrees of fate, calling them the 'head' and the 'tail', as if the powers and emanations of rays followed these mathematical quantities, positions, houses, points, distances, rather than the qualities and natures of the rays.

Alas, they never noticed this error due to their ignorance of physics. Nor could they avoid it, since they wished new constellations to exist at every single moment, altering the lives, fortunes, characters, and temperaments of those being born.

Chapter Five

What those things to be observed indicated. By which conjectures they defined them.

From the mathematicians, astrologers received what was to be observed, but with a perverse intention, which, according to Aristotle (if we believe him), was also the root of ancient error. They judged natural things as if they were mathematical.

After this, it remained to investigate what these signs, stars, motions, and aspects might signify or effect, when arranged in this or that way. Here astrologers relied on the most trivial and deceptive conjectures, which we shall describe.

Concerning the signs, they invented the following.

For the Egyptians all things consisted of the four elements. Since they had already accepted twelve signs, the division seemed neat and convenient. The twelve could be distinguished by the four elements. Each element is repeated three times, filling out the number of the signs.

Since they thought the first bodies fire and earth, being the centre and circumference (to them fire was the highest body), and air and water had come between them (as Plato also

shows in the *Timaeus*), they designated the first sign as fiery, the second as earthy, the third as airy, the fourth as watery. Proceeding again in similar sequence, the fifth fiery, the sixth earthy, and so on.

From this, those signs at a triangular interval from each other (that is, with three signs intervening) were thought of the same nature, because the fifth sign returned to the nature of the first.

Those at a hexagonal interval were partly related, partly discordant, but more related, since the first was fiery, the third airy.

Those at a square interval were entirely opposed, if fire and water are utterly discordant.

Thus the fiction arose that a triangular 'trine' aspect produced good influence, a square bad, and a hexagonal 'sextile' truly intermediate. Opposition was also bad, because the stars gaze at each other from opposite sides.

Some, however, want this intermediate hexagonal relationship to depend on the qualities of the signs in it, just as in the other aspects. For among the signs, some are agreeable in quality, others discordant.

Thus, it is clear how these ideas gave birth to each other, and how notions that would prove utterly contemptible when heard in isolation, are here interwoven.

If that first foundation, the wavering and weak twelvefold signs, introduced by arbitrary reckoning (as even the astrologers admit), is false, everything built upon it is ruinous. And yet very many weeds spring up from that one root.

The trigons, on which the astrologers place great emphasis, birth the 'trigon rulers,' that is, the rulers (as they say) of the triplicities. From this, the Chaldeans later devised their doctrine concerning the bounds, the Egyptians *monomoiria*, and the Arabs their doctrines on the great conjunctions. Ptolemy and all the rest (although in different ways) divided the

regions of the world under the signs, so that one trigon might be assigned to the East, another to the West, another to the South, another to the North. Upon this, predictions about the fate of the year greatly depend, so that we might know from what region something will come.

But let us return to the other properties of the signs, for we have sufficiently uncovered the mystery of the division into elements. Having drawn back the veil, we have found nothing but the most unadulterated nonsense.

Astrologers devised doctrines in which the Sun, gliding beneath the signs, operates within them. Hence, they divided the signs into fixed, movable, and common; others from the names of the parts of the circle, as though they were similar not only in image but also in powers and nature. They called some signs 'human,' others 'brute,' because Aquarius was depicted as a youth, and Aries as a ram. Almost all the doctrines concerning the signs were born from the operation of the Sun, or from the names of the images, or from the division by elements. To hear these doctrines is to hear things already refuted.

They judged the nature of the planets from their colours, as Albumasar attests, saying this is the conjecture of the whole body of astrologers. From this also came the nature of the fixed stars. The red stars astrologers claimed to be of the nature of Mars, such as the eye of Taurus [Aldebaran], and the heart of Scorpio [Antares]. The irrationality and falseness of these notions has already been sufficiently demonstrated.

In this manner, they gradually introduced the affinities of the planets with the signs. Exaltations were first discovered by the Chaldeans (as we wrote in Book Eight), whereby in those degrees the stars are furthest distant from the centres of their *apsides*. The Egyptians added the domiciles, with a conjecture first taken from Leo, under which the power of the Sun was seen to grow. Beginning from that sign, astrologers assigned the remaining signs to the other planets according to the order of the spheres.

We have discussed the trigons. The division of the signs produced the bounds, the *decans*, the *dodecatemoria*, the *novenarii*, and the *monomoiria*. Since these seemed too vast (otherwise, excluding others, they would be assigned only to the rulership of a single planet) astrologers divided the signs into various and multiple parts. They wished one part to be the bounds of one star, another part those of another.

But since each astrologer determined his own conjecture differently, there arose five opinions about the bounds. To this day, astrologers still contend endlessly over this. Some divided the signs into *decans*, that is, into three parts; others into nine, others into twelve, but all by whim, without reason. Why should each sign should be divided into twelve parts, just because there are twelve signs? Or into three parts on account of the perfection of the number three? Or into nine, because the ninth sign agrees in quality with the first, Sagittarius with Aries, Capricorn with Taurus, and so on with the rest?

Even Ptolemy, an astrologer, laughed at this when he read it. But those divine men, the Egyptians, the Indians, the Chaldeans… for them, it was as if they were embracing metaphysics!

Let us come to the houses, whose properties astrologers defined by certain resemblance. Because the Midheaven is lofty, it was supposed to signify lofty things, empires, kingdoms, and powers, as if man does not descend inwards rather than ascend. The East (the Ascendant) indicates the one being born, emerging from the womb. The seventh place, adversaries, because it is opposed to the first. The twelfth, prisons and darkness, because when the Sun comes to that place, with vapours having been stirred up and not yet dispersed, the air becomes darkened.

But it is not necessary to recapitulate everything we have mentioned above, only enough to call back to memory how the doctrines of this celestial discipline came forth like

oracles, and how they are connected in the manner of fables, with one fable extending its hand to another.

When they determined the intervals of the trine and sextile to be favourable, and certain planets to be good (Venus and Jupiter, but also the Sun and Moon), since good things delight in good things, they claimed Jupiter rejoices in the eleventh house, the Sun in the ninth (one is in sextile, the other in trine to the Ascendant); the Moon in the third, Venus in the fifth, which are at similar intervals from the Ascendant. They gave the better and more excellent places – those above the Earth – to Jupiter and the Sun; the lower ones – those beneath the Earth – to the lesser planets.

Likewise, they claimed Mars rejoices in the sixth house, and Saturn in the twelfth, since those houses are malign, just as those planets are malefics.

According to the nature of these planets, many properties were next attributed by astrologers to the houses themselves. To the ninth house, prophecies, which the Sun is believed to grant. To the third, short journeys, just as the Moon travels the shortest path of all the stars. To the twelfth, sorrow, according to the condition of Saturn, and secret enemies. To the sixth, servants and illnesses, because of the nature of a harmful, yet active and agile planet. To the fifth, joys, children, pleasures, because of Venus, whom they appointed as the patron of such matters not so much by reasoned judgement, as by the brightness, rays, and beauty of the star. From this came that ‘nurturing above, smiling nectar-like’ concept, for which reason Venus was believed by the ancients to be the goddess of elegance and charm.

Using such demonstrations, astrologers wove a web of illusions like the daughter of Arachne. If you look at it from afar, the web deceives by the pretended size of the threads and the allure of its weaving and the flattery of its novelty. If you look at it close up, you scorn it; if you touch it with your hand, you tear it and dissolve it.

Their descendants built upon this invention. The more ancient the fiction, the stronger it seems, and the deceit of its origin lies more hidden. As always happens, authority is won by age.

Nor indeed have we covered everything, only the method of the invention, and the slippery nature of the error. The remaining astrological doctrines, however, following that example, are all supported by the lightest conjectures and similarities most dissimilar, even to earthly things.

For example: that planets are fortunate when they advance, unfortunate when they retrograde, and neutral when stationary. As if, when retrograding, they deny what they had promised; when advancing, they fulfil what they promise; when stationary, they delay what they bestow.

That the Sun and Moon when in eclipse bring great calamities. These especially cause terror, their cause being unknown, as though the gods were either abandoning us or revoking their favour.

That a person is exalted when stars are placed in the apogee, since that place is also considered the highest.

As for the Parts of the Moon, of the other stars, and finally even of oats and beans, who has introduced this error? We discussed this in Book Eight.

After establishing doctrines on conjectures of this kind, astrologers began to observe the nativities of those being born. If once or twice the doctrines matched the outcome, no further trust in experiment was needed, nor any greater authority. For the sake of argument, if someone born with Mars occupying Scorpio became famous in war, it was held without doubt that Scorpio was the domicile of Mars. As though it were not a different thing for Mars to be placed in that position, and a different thing for someone warlike to be born from Mars!

As though they could faithfully test anything in the motions of the heavens, when they so often go wrong.

Astrologers also noted what happened to the ruler of someone's nativity in a given chart, and from this composed rules and canons. Since this was not the way of true experiments, chance and rashness stood in place of reason. Therefore, when others observed the same things at other times, different outcomes resulted.

Hence it came to be that there emerged as many forms of astrology as there were observers in error. Thence came confusion and conflicting opinions, which we have treated at length in the previous book.

Chapter Six

By what devices astrology grew and how it propagated itself.

From trifling conjectures, astrology arose, and it grew through deceptive experiments, fostered by the corruption of the age and nourished by the curiosity of men, none of whom does not desire to know the future about himself, and to seek such things most truly from the heavens. How many among the masses, or even the scholars, understand how wrongly these things are sought from the heavens?

To this was added the interest of princes, who believed everything due to ignorance, and hoped for everything due to desire. Whenever happiness was pronounced upon them from the heavens, they were no more willing to overturn astrology than to reject that same happiness. Astrologers sometimes predict truths, sometimes by chance, sometimes cleverly, sometimes with a demon giving support. Someone who predicts many things sometimes succeeds.

Applause, acclamation, and a thousand lies were at once overwhelmed by forgetfulness. Much trust and authority was also granted to astrologers by oracles, who not only approved of the art, but also practiced it themselves.

Apollo was asked whether a male or female would be born. He replied, 'A female,' since at conception the Moon was being carried towards Venus. What greater testimony to the profession could there be, than to have the gods as its authors?

The wicked demons (so named not only by us but also by the Platonists) knew how much poison they might administer to the world by one superstition. Once astrology had penetrated deeply into the veins, it would first take away faith in religion, the highest good of men. All things would hang from heaven by fatal necessity, with no miracles, no foreknowledge of the future from God. All things would arise from the power of the constellations. It would provide a defence for vices, as if they descended upon us from the sky.

Finally, perhaps, astrology would even corrupt the good, for all things which are from nature are good. It would infect the good arts, medicine and philosophy, so that, although it would not overthrow them, just as it could not overthrow theology, it would nonetheless contaminate them. Philosophy would turn from true reasoning to fables; medicine, from natural and effective remedies to empty observations and old women's ravings. One single plague of perverse superstition would become deadly to both body and soul at once.

Wisdom would lie ruined. Astrology consulted on what should be done, at what time, in what way. Utter folly itself, seated at the helm, holding the rudder of life in its hand.

The demons hoped this would come to pass: that astrology, alone among all superstitions, might gain authority from heaven and from mathematical calculations. It would cloak the less concealed fraud and the less adorned weakness of the other superstitions. Nor would those other superstitions be thought vain, if they were considered mere appendages

and foster-children of celestial doctrine. For there is none (as we showed in the first book) which does not acknowledge astrology as either sister, or nurse, or parent, or guide.

A worthy prize, for which even the most wicked demons might make themselves astrologers. They would leave no stone unturned, so that the pestilent persuasion might seize ever more upon the minds and pursuits of men.

That demons were involved in oracles, and in the rules of astrologers, must be believed for this reason among others: that they might deceive, and give credibility to deception. Who would doubt this, even Porphyry? Porphyry himself says oracles lied when responding based on astrological doctrines. This would not have happened if astrology had been true and a true foreteller of the future, since nothing could lie hidden in it from demons most skilled in natural things.

Maturing amid many protections, astrology completely seized the Egyptians and Chaldeans, and birthed among them a superstitious medicine. For Necipsus wrote in Egypt about which *decan* produced which disease, and by the power of which *decan* it would in turn be cured, a matter held among arcane things and counted among mysteries, as if the division of the *decans* were not purely arbitrary. This division was thoroughly ridiculed and rejected by Ptolemy. From here emerged magic, which is nothing other than a compound of idolatry, astrology, and superstitious medicine, superstitions which, just like the others, we refuted individually in the books *On the True Faith Against the Seven Enemies.*

Chapter Seven

How astrology passed from the Egyptians to others.

From the Egyptians and Chaldeans, astrology came to the Greeks, but through ignoble authors. Except in the houses of quacks, it did not enter the Lyceum or the Academy, nor even

the Stoa, although Thales' efforts allowed it to be admitted harmoniously. Nor could Epicurus, who believed in atoms and the void, believe in astrology.

The first astrologer to be well-received in the schools, in the one hundred and fortieth year after Christ, was Ptolemy, who cultivated it more sparingly than others, so that he seems not so much to have favoured this madness as to have wished to set limits upon it. The authority of one man, always a mathematician, rarely a philosopher, falls away in the face of so many of the most famous men in mathematics and philosophy opposing it.

The name of Ptolemy misled some Greeks into error, especially those already inclined to superstition, such as Porphyry, whose excessive devotion to the worship of demons and concern with superstitions were condemned both by his teacher Plotinus and by his student Iamblichus.

From the Greeks, astrology was handed down to the Arabs with greater authority, men who marvelled at whatever they found written by the Greeks, and who looked up to the names of the Egyptians and Chaldeans, awed by their vain appearance of antiquity. But just as astrology, received from the barbarians, was purged and trimmed, as far as he could, by Ptolemy, the most prudent of astrologers, the astrology received from the Greeks fell into the hands of Albumasar. A grammarian and a writer of history reports, Albumasar's work is filled with countless trifles and fables. His astrology is as to Ptolemy's, as astrology is to the good arts, in terms of badness. A man inclined to idle loquacity, and almost entirely unacquainted with philosophy and even with astronomy, he was ridiculed by every learned astrologer, but pleasing to the multitude, among whom he is great who says more, not who says better.

At that time, too, the study of mathematics increased (indeed, of all philosophy and disciplines) in Spain, where King Alfonso reigned. Most diligent in mathematics and the calculation of celestial motions, he also loved divinatory vanity, although he was not trained in philosophical studies. Through his favour and policies, many Arab and Greek records of

the art come down to us, especially through John of Seville and Michael Scot, a writer of no weight but of much superstition.

These things were first embraced by Albertus Magnus (on account of their novelty, as he was born in those times), but I think he did not approve of them so much in old age as he did in his youth. He published on magic in his adolescence but in mature age detested it, leading a most holy and blameless life in a monastery.

In the course of time, due to both the long duration of tradition and the multitude of writers, and because of a certain affinity with mathematical astronomy (both in name and in the subjects involved), it became unclear whether astrology was a science without deception or a superstition. Yet, although for so many centuries it has been accepted by the multitude (whose nature is to understand nothing), cultivated by the superstitious (for whom to know is to rave), and sought out by curious men with no judgement, astrology has always, as we warned in the first book, been ridiculed, refuted, and utterly rejected by the prudent, the philosophers, and the most holy men.

At the time when the worship of idols was growing in Egypt and Chaldea, and along with it the madness of all vanities, it was condemned among the Hebrews – worshippers of the true God – through Moses, through Isaiah, through Jeremiah, and through other prophets, by both voice and writings.

When astrology came to Greece, it did not please Pythagoras, according to both Diogenes and Theodoret. The Platonists and Peripatetics did not even consider it worthy to speak of at all, regarding it as one of the sleight-of-hand arts. Eudoxus of Cnidus, a most prudent lawgiver (he wrote laws for his citizens), likewise a great philosopher under Plato, and by the consensus of all his age the leading man in mathematics, firmly declared that astrologers were not to be believed, and left it written. Cassander and Archelaus,

distinguished mathematicians, did the same several years later; so too did Panaetius and Carneades, serious and true philosophers.

Whenever those diviners came to Rome, from Egypt or from Babylon, Roman foresight drove them from the city with the most severe laws. Thus, under Tiberius, under Vitellius, under Diocletian, under Constantine, under Gratian, under Valentinian, under Theodosius, astrologers were either compelled to abandon their profession or to suffer penalties for practicing it.

Hadrian's delight in their tricks is clearly attributable to fate. By a certain inclination of nature he so loved Egypt that nothing Egyptian could displease him. Yet even at that time, Favorinus openly, and Plutarch obliquely, ridiculed these charlatans with the gravest judgement of character.

Soon after, under Ptolemy, when astrology seemed scarcely to be ennobled, it was condemned in the judgements of the great Platonist Plotinus, of the distinguished Peripatetic Alexander of Aphrodisias, and of Origen, most eminent in every branch of learning.

When it came to the Arabs, it indeed captivated Haly Abenragel and Albumasar, men who were neither dialecticians nor philosophers. But it did not captivate Averroes or Avicenna.

When it first appeared in the University of Paris, it narrowly escaped annihilation by fire. Some years later Roger Bacon and a few others tried to give it legitimacy, but they were opposed by most learned men: William of Auvergne, Bishop of Paris; and after him, Nicholas Oresme, an excellent mathematician; and Henry of Hesse [Henry of Langenstein], and John Cato, and Brenlanlius the Briton, all detesting astrology. Not only in the part where it injures religion, but altogether, as vain and false.

Astrology has never obtained the name of an art in legal recognition, for there has always been someone, a defender of Truth, who protested against it.

Here ends the twelfth book of Giovanni Pico della Mirandola's Disputations Against Divinatory Astrology.

Disputations Against Divinatory Astrology

By Giovanni Pico della Mirandola, Count of Concordia

Appendices

Appendix A: Gianfrancesco Pico della Mirandola: *On the Foreknowledge of Things*, Book IV, chapter three, pp.468-469.

On the Types of Superstition According to the Teachings of Giovanni Pico

Our uncle, Giovanni Pico, often classified superstitions differently from other thinkers. He determined that superstition is anything that neither pertains to human reason nor to divine truth, making an exception for lower nature, whose end is directed towards humanity. From this, it follows that every superstitious art must justly be scorned and mocked by philosophers as irrational, and condemned and banned by theologians as demonic. Therefore, it ought to be entirely abandoned, as divine and human truths alike repudiate it, reason refutes it, experience disproves it, laws punish it, and divine authority prohibits it.

Pico adds that just as all true knowledge comes from God or reason, so superstition, departing from these sources, stems from demons or from irrational imagination. He argues these correspond in rightful proportion: in the microcosm, irrational imagination is nearest to reason but disobeys it, while in the macrocosm, the angelic nature stands closest to God, but the demon's nature is rebellious and defiant of divine will.

Dionysius the Areopagite attributed irrational imagination to superstition and its followers. Giovanni Pico teaches that superstitions differ both from divine truths and from each other, whether in the actual matter of belief or the manner in which they are practiced.

Regarding the substance of superstition, it is distinct from human affairs because it claims to accomplish things that human power or effort cannot achieve. It is distinct from divine matters in that divine acts aim towards good, while superstition strives towards evil and the most wicked outcomes.

As for its mode of operation, superstition differs from both human and divine activities in that it functions through demonic power and phantasmal imagination.

Pico further divides superstitions in a manner resembling human sciences, which they falsely imitate, ascending towards them through analogy and proportion. He compares various forms of superstition to branches of human knowledge: the *Ars Notoria*, the art of Bulaphia, and the art of Artephius correspond to logic; divination parallels theoretical disciplines, while magic corresponds to practical arts, being dedicated to the performance of wonders.

Since knowledge of future contingents belongs exclusively to God, the hallmark of superstition is its false promise to predict such events. Pico categorises divination according to the elements or beings it exploits. If it abuses the heavens, it manifests as astrology. If it manipulates the elements, it becomes pyromancy (fire), geomancy (earth), aeromancy (air), and hydromancy (water). If it uses animals, it is augury or auspices. If it involves humans, it turns into necromancy, the interpretation of sneezing, and various foolish practices. If it calls upon demons, it degenerates into phialomancy, trivialities, readings from fingernails, circle rites, and other harmful delusions.

Pico promised to refute these practices in the progress of his work, noting that while his writings addressed only a few superstitions, he had composed twelve books against astrology, which were published after his death.

Appendix B:

Gianfrancesco Pico della Mirandola to the Most Holy Father Oliviero Carafa, Bishop of Sabina and Cardinal of Naples, Greetings.

Most esteemed father, when Apollonius of Tyana set out upon the road of learning (a journey later celebrated by Philostratus), he is said to have desired to find and recognise good men. He earnestly prayed to the Sun that this would be granted. This wish, though not blameworthy, can hardly be praised; likewise, his prayer to the Sun cannot be condemned. Uneducated and common people, guided by an innate light of truth, universally proclaim this, to say nothing of the strongest arguments and the testimony of divine scriptures.

If this is something to be sought from Almighty God, those who not only have the good fortune to recognise virtuous people but indeed have ties to them of family and blood, may surely rejoice. They may reap the benefits that friendship with good people produces.

I neither deny nor conceal that such a blessing has been granted to me by divine providence, since I found within the very walls of my home Giovanni Pico della Mirandola. Brother of my father Galeotto, a man worthy of being eagerly sought by Apollonius beyond the Caucasus and among the Brahmins, and even unto the farthest ends of the world. From him, I received many benefits and great kindnesses.

While he lived among us, I deemed it right to return favour for favour as far as I could; but after his passing, I believed it even more my duty to repay the debt of gratitude. This was all the more necessary because his death not only imperilled his renowned scholarly efforts but also inflicted a considerable loss upon the Church.

For this reason, I have committed certain things to writing on his behalf, not just once but several times, and I have taken care to have his works, acquired through long and arduous

research, transcribed into multiple copies. However, I faced considerable difficulty in restoring those books that refute the practice of divinatory astrology, since they had been written in a style (which was his habit) marked by rapidity of writing and dictation. They appeared more like a language other than Latin. The books were so filled with corrections that it was difficult to discern deliberate punctuation or proper revision. They were so fragmented and disordered in parts that it seemed almost impossible for even the author himself to copy them accurately.

These books (more treasures than mere books) I have, so to speak, brought back to life and rescued from ruin. After long deliberation about to whom I should dedicate and inscribe them, you, most revered Bishop, came to mind. I found myself unable to choose anyone else.

To whom could I more appropriately and honourably dedicate the literary works of so learned a man, who was also a relative, than you? Especially these writings, which refute errors opposed to our Christian religion. You excel in learning and are connected to me through your relationship with Giovanni Tommaso Carafa, Count of Maglione, my father-in-law, with whom you share the closest ties of kinship. Furthermore, you hold a position among the men of religion that is nearest to the supreme authority itself.

Therefore, accept these works willingly, and I entreat you to read them when you manage to steal some leisure from your weighty affairs. The art of astrology – or, rather, the plague of astrology – conceals its poison with deception, and has raged with a savage and ruinous fury. In reading these books, you will come to know and rejoice that it has been annihilated through the efforts of my uncle, Giovanni Pico.

Farewell, most excellent father.

From Mirandola, on the fourth day from the Kalends of July [28th June].

Appendix C:

Gianfrancesco Pico della Mirandola to Lovers of Truth.

Lovers of Truth, rejoice! You who toil with fervent desire to illuminate and expand it, lift up your spirits. Behold, the Disputations of Giovanni Pico della Mirandola Against the Astrologers, now come forth into public view. This is the Pico whose sublime mind and universal learning have already astonished nearly the entire world.

I speak of Disputations that will grieve those who hate and attack the Truth. Those who labour in service of astrological vanity merely to fleece the ignorant shall wail and burst with rage, or else abandon their error.

Let not your joy be diminished by the thought that Pico, called to God by a death premature for us, though late for himself, did not refine and polish these books with his final touch, nor complete the concluding section as an epilogue to the whole work. Perhaps it leaves something to be desired in terms of decorative flourish, but it detracts nothing from the full benefit to be gained by the reader.

This vanity – the root and tree of all superstitions – has been denounced and detested by the oracles of the prophets, stripped of its foliage by our theologians and philosophers, whether Greek, Latin, or barbarian, and scorned or struck down by the sharp axes of learned reasoning. It has been uprooted and removed by imperial laws and pontifical decrees, yet human curiosity has often replanted it in the same pit, supported it with new props, and allowed it to flourish anew. Thus, it has never been entirely eradicated nor thoroughly destroyed, despite the most potent instruments of reason seeking its complete annihilation.

But now our Pico has consumed this accursed tree – from roots to trunk, from trunk to branches, and from branches to leaves – with the most torrential fire of true philosophy and

true theology, and with the inventions and meditations of his incomparable intellect. He has thoroughly burned it to ashes, and so forcefully scattered those ashes with the whirlwind of his eloquence that any supporter of this tree, or any of its advanced defenders (unless truly out of their minds), must either cry out in grief over its destruction or, casting aside and scorning their vanities, rejoice with exultation.

Scholars of all nations, arm your minds with these arguments. Strengthen them with these testimonies, both human and divine. With mighty axes and burning torches, we shall cut down, uproot, and utterly destroy any sprouts of that felled and extinguished tree that may yet, through the fault of poorly cultivated soil, lie hidden within the earth's depths and attempt to regrow.

Appendix D: Gianfrancesco Pico della Mirandola's Table of Contents

Table

A summary of the contents found in the books of Disputations by Giovanni Pico della Mirandola, Prince of Letters, Against the Astrologers:

First Book: A preface. Also, astrology is condemned by philosophers, prophets, Caesars, and Pontiffs. A description of the men who have written astrological works.

Second Book: The uselessness, falsity, and ignorance inherent in the profession of astrology in general, along with the negligence of contemporary practitioners. Also addressed is the question of why astrologers sometimes make accurate predictions even though the profession itself is false.

Third Book: The arguments that claim to prove the truth of astrology are presented, then refuted and overturned.

Fourth Book: The belief that celestial bodies cause the effects astrologers attribute is dismantled. Furthermore, what is not caused by the heavens is not signified by them, and the futility of horary questions or interrogations is demonstrated.

Fifth Book: The notions of great circles, Saturnian revolutions, and grand conjunctions are rejected and dismissed.

Sixth Book: The destruction of various astrological concepts, including houses, signs, aspects, conjunctions and combustions, retrogradations, the head and tail of the dragon, antiscia, commanding and obeying signs, exaltations, triplicities, faces, bounds, *dodecatemoria*, *novenarii*, *monomoiria*, properties of degrees, parts (such as the Part of Fortune), and climacteric years.

Seventh Book: The inability to correctly determine the origins of fate, whether particular or universal, whether for a human being or anything else. The erroneous determination of the timing of events through directions or other methods, as well as numerous errors regarding fixed stars.

Eighth Book: The uncertainty of the number of spheres, and the error of astrologers in asserting a fixed number. Also, the errors regarding the difference between images and signs, as well as invisible images.

Ninth Book: The uncertainty of the time of birth and other beginnings, and the errors in the division of houses, signs, places, planets, the motion of the eight orbs, and directions.

Tenth Book: The arguments astrologers use to strengthen their position, reduced to five categories, all of which are shown to be ineffective and laughable.

Eleventh Book: The inability to gain knowledge through experience, or, if such experience is possible, it has not yet been achieved.

Twelfth Book: The inability to obtain knowledge through revelation. Additionally, a discussion of the place of origin, growth, height, and propagation of knowledge.

The chapters of the work

The first book is not divided into more chapters, but in a single chapter, the authority of philosophers, prophets, Caesars, and Pontiffs rejects astrology.

The second book contains the uselessness and falseness of the profession, the ignorance and negligence of its practitioners.

Chapter One: That this art is uncertain, even in the judgement of its authorities.

Chapter Two: Auspices, which they call elections, are shown to be useless by the testimony of an astrologer, as well as by reason and experience.

Chapter Three: Astronomy is not useful in determining what should be done or avoided.

Chapter Four: Astrology is so not useful to religion as Roger Bacon and Pierre d'Ailly have thought.

Chapter Five: How harmful astrology is, and how destructive to the Christian religion.

Chapter Six: This art is fallacious, if it exists at all, because of many factors and because of the conflicting opinions of astrologers.

Chapter Seven: On the ignorance of the astrologers of our age.

Chapter Eight: On the carelessness of the astrologers of our time, which is so great that, even if astrology were true, they themselves could not be true.

Chapter Nine: What the astrologers say rarely happens; this is shown by both foreign and domestic examples.

Chapter Ten: Why astrologers sometimes predict the truth.

The third book contains arguments favouring astrologers, and these are refuted.

Chapter One: What was said in the preceding book. What is to be said next, and in what order.

Chapter Two: Five reasons for supporting the power of astrology.

Chapter Three: The first argument will be refuted. It will be shown that the heavens are a universal cause and should not be referred to as the cause of the diversity of individuals.

Chapter Four: In what way the heavens act through motion and light, and how they are the universal cause of meteorological, mineral, and living elements.

Chapter Five: Beyond the common influence of motion and light, there exists no power peculiar to the heavens.

Chapter Six: The light of the Moon, just as that of the Sun, is vital; neither does it cause cold or humidity, except by accident.

Chapter Seven: The doctrines of the astrologers cannot be defended, if as Ibn Ezra thought, all the stars are considered hot.

Chapter Eight: Objection against those things which have been said.

Chapter Nine: The objection is resolved. It is shown that neither the specific nor the individual differences of things depend on the motion of the heavens.

Chapter Ten: Stars other than the Sun and Moon either have no effect on us or certainly very little.

Chapter Eleven: How the stars, while being the same, might act differently upon us at different times.

Chapter Twelve: Which variations of effects can be reduced to the heavens, and which cannot.

Chapter Thirteen: The Sun accomplishes many things that astrologers believe are done by other stars.

Chapter Fourteen: How the power of the Moon varies. That certain days of the Moon are observed by vain superstition.

Chapter Fifteen: The tides of the sea can be attributed to a cause other than the Moon. Insofar as the Moon causes the tides, it does not support astrology.

Chapter Sixteen: The opinion of Galen regarding the critical days, which he attributes to the Moon, is refuted.

Chapter Seventeen: The periods of the humours are not to be attributed to the movements of the stars.

Chapter Eighteen: The misfortune of an eighth-month birth is not to be ascribed to Saturn.

Chapter Nineteen: Why do sailors, doctors, and farmers more often predict the truth than astrologers?

Chapter Twenty: Not all things predicted by astrologers depend on the primary qualities.

Chapter Twenty-One: Neither the harms of the elements nor the damaging of our bodies derives from the heavens.

Chapter Twenty-Two: The diversity of talents and character does not entirely depend on the primary qualities.

Chapter Twenty-Three: Neither wars nor external affairs depend on the primary qualities.

Chapter Twenty-Four: The stars do not possess occult powers through which they bring forth the hidden properties of inferior things, but only vivifying heat and light.

Chapter Twenty-Five: If each star is granted its own and proper power, that power must still be universal.

Chapter Twenty-Six: The epilogue of this book, with the rejection of certain astrological arguments. The turning back of such arguments against the astrologers.

Chapter Twenty-Seven

The fourth book concerns the efficiency and significance of the heavens.

Chapter One: This custom has been observed in disputation and must continue to be observed. Even if theologians grant to astrologers that astrology is the greatest truth, astrology would still amount to nothing.

Chapter Two: Chance events are not from the heavens.

Chapter Three: How God is the cause of chance events. Angels, the heavens, ourselves, and fortune.

Chapter Four: If something happens that seems to exceed our powers, it should not be attributed to the heavens. Rather, it should be attributed either to the angels or to God. And here, many things are said about fate, and how divine foresight does not take away our freedom.

Chapter Five: Neither past events nor those things concerning others can be foreseen from any constellation.

Chapter Six: Things that will happen much later in time cannot be caused by the present constellation.

Chapter Seven: Concerning auspices, which they call elections. How vain and impossible is the opinion of the astrologers.

Chapter Eight: Astrologers try to subject our mind to the heavens, although, as they are clever, they attempt to conceal it.

Chapter Nine: The character of men is not fashioned by the heavens.

Chapter Ten: Bad religions, and likewise good ones, are not subject to the heavens.

Chapter Eleven: Bodily dispositions are not caused by the heavens.

Chapter Twelve: The heavens cannot be a sign of something for which they are not the cause.

Chapter Thirteen: Whether the stars are signs or causes, the branch of astrology that deals with horary questions is of no substance at all.

Chapter Fourteen: Divine miracles are neither brought about nor signified by the heavens. Rather miracles are indicated by miracles, just as natural events are indicated by natural causes.

Chapter Fifteen: The star of the Magi cannot be understood as any astrological configuration. An explanation is provided for certain passages of Scripture that might seem, to the unlearned, to support astrology.

Chapter Sixteen: Those forces that surpass the powers of nature, even in relation to what is contained naturally within themselves, cannot be signified by the heavens.

The fifth book contains a refutation of the constellations to which major human events are ascribed.

Chapter One: The decrees of astrologers concerning great conjunctions are refuted, and those who wish to judge great changes in inferior things by such conjunctions are found to be deceitful.

Chapter Two: The manner in which astrologers pass judgement on greater matters. The refutation of great orbits.

Chapter Three: Saturnian revolutions, an invention of Aboasar, are contrary both to historical records and to reason.

Chapter Four: The topics to be discussed and the conflicting opinions of astrologers regarding the great conjunctions.

Chapter Five: When planets are together in great conjunction, they are no more capable of influencing events than when separated. These so-called great conjunctions are a new invention, born from a flawed understanding of Ptolemy's writings.

Chapter Six: The principal astrologers used mean conjunctions, not true ones. Other errors of theirs regarding the same.

Chapter Seven: What order is to be observed. That Pierre d'Ailly held different opinions at different times.

Chapter Eight: The timing of events is to be sought not from astrology, as d'Ailly believes, but from history.

Chapter Nine: The main conclusion of d'Ailly in the book On the Harmony of History and Astrology.

Chapter Ten: That d'Ailly errs in many ways. Even if what he assumes were true, he would still not achieve his goal.

Chapter Eleven: On the timing of the Flood conjunction, astrologers disagree both among themselves and with the truth. Even if they are granted their assumptions, they still do not prove their assertions.

Chapter Twelve: How deluded is Abraham the Jew concerning the conjunction signifying Moses and the prophecy of the Messiah!

Chapter Thirteen: Various mean conjunctions are attributed to the Christian law, even without any astrological reasoning.

Chapter Fourteen: The commonly accepted nativity chart of Jesus is not true. Nor does it indicate that He would either die a violent death or be a great prophet.

Chapter Fifteen: That which Albumasar said about Muhammad is false by experiment.

Chapter Sixteen: In the prophecy of the Antichrist, some deceivers have already appeared, and others will be deceivers in the future.

Chapter Seventeen: How lightly the astrologers argue there can only be six religions. That the law of the Hebrews should be called Jovian or Solar rather than Saturnian.